रजिस्टर्ड सं. डी-(डी एन)--128/90 REGISTERED NO. D.—(D.N.) 128/90

सत्यमेव जयते

# भारत का राजपत्र
# The Gazette of India

प्राधिकार से प्रकाशित
PUBLISHED BY AUTHORITY

सं० 46] नई दिल्ली, शनिवार, नवम्बर 17, 1990 (कार्तिक 26, 1912)
No. 46] NEW DELHI, SATURDAY, NOVEMBER 17, 1990 (KARTIKA 26, 1912)

इस भाग में भिन्न पृष्ठ संख्या दी जाती है जिससे कि यह अलग संकलन के रूप में रखा जा सके
[Separate paging is given to this Part in order that it may be filed as a separate compilation]

## भाग III—खण्ड 2
## [PART III—SECTION 2]

### पेटेन्ट कार्यालय द्वारा जारी की गई पेटेन्टों और डिजाइनों से सम्बन्धित अधिसूचनाएं और नोटिस
### [Notifications and Notices Issued by the Patent Office relating to Patents and Designs]

THE PATENT OFFICE

PATENTS AND DESIGNS

Calcutta, the 17th November 1990

ADDRESS AND JURISDICTION OF OFFICES OF THE PATENT OFFICE

The Patent Office has its Head Office at Calcutta and Branch Offices at Bombay, Delhi and Madras having territorial jurisdiction on a zonal basis as shown below :—

Patent Office Branch,
Todi Estates, III Floor,
Lower Parel (West),
Bombay-400 013.

The States of Gujarat, Maharashtra and Madhya Pradesh and the Union Territories of Goa, Daman and Diu and Dadra and Nagar Haveli.

Telegraphic address "PATOFFICE".

Patent Office Branch,
Unit No. 401 to 405, III Floor,
Municipal Market Building,
Saraswati Marg, Karol Bagh,
New Delhi-110 005.

The States of Haryana, Himachal Pradesh, Jammu and Kashmir, Punjab, Rajasthan and Uttar Pradesh and the Union Territories of Chandigarh and Delhi.

Telegraphic address "PATENTOFIC".

Patent Office Branch,
61, Wallajah Road,
Madras-600 002.

The States of Andhra Pradesh, Karnataka, Kerala, Tamilnadu, and the Union Territories of Pondicherry, Laccadive, Minicoy and Aminidivi Islands.

Telegraphic address "PATENTOFIS".

Patent Office (Head Office),
"NIZAM PALACE", 2nd M.S.O. Bldg.,
5th, 6th and 7th Floor,
234/4, Acharya Jagdish Bose Road,
Calcutta-700 020.

Rest of India.

Telegraphic address "PATENTS".

All applications, notices, statements or other documents or any fees required by the Patents Act, 1970 or the Patents Rules, 1972 will be received only at the appropriate Offices of the Patent Office.

*Fees* :—The fees may either be paid in cash or may be sent by Money Order or Postal Order, payable to the Controller at the appropriate Offices or by Bank Draft or Cheque, payable to the Controller drawn on a scheduled bank at the place where the appropriate office is situated.

**पेटेंट कार्यालय**

**एकस्व तथा अभिकल्प**

**कलकत्ता, दिनांक 17 नवम्बर 1990**

**पेटेंट कार्यालय के कार्यालयों के पते एवं क्षेत्राधिकार**

पेटेंट कार्यालय का प्रधान कार्यालय कलकत्ता में स्थित है तथा बम्बई, दिल्ली एवं मद्रास में इसके शाखा कार्यालय हैं, जिनके प्रादेशिक क्षेत्राधिकार जोन के आधार पर निम्न रूप में प्रदर्शित हैं :—

पेटेंट कार्यालय शाखा, टोढी इस्टेट,
तीसरा तल, लोअर परेल (पश्चिम),
बम्बई-400 013

गुजरात, महाराष्ट्र तथा मध्य प्रदेश राज्य क्षेत्र एवं संघ शासित क्षेत्र गोआ, दमन तथा दिव एवं दादरा और नगर हवेली।

तार पता—"पेटोफिस"

पेटेंट कार्यालय शाखा,
इकाई सं० 401 से 405, तीसरा तल,
नगरपालिका बाजार भवन,
सरस्वती मार्ग, करोल बाग,
नई दिल्ली-110 005

हरियाणा, हिमाचल प्रदेश, जम्मू तथा कश्मीर, पंजाब, राजस्थान तथा उत्तर प्रदेश राज्य क्षेत्रों एवं संघ शासित क्षेत्र चंडीगढ़ तथा दिल्ली।

तार पता—"पेटेंटोफिक"

पेटेंट कार्यालय शाखा,
61, वालाजाह रोड,
मद्रास-600 002

आंध्र प्रदेश, कर्नाटक, केरल, तमिलनाडु राज्य क्षेत्र एवं संघ शासित क्षेत्र पाण्डिचेरी, लक्षद्वीप, मिनिकॉय तथा एमिनिदिवि द्वीप।

तार पता—"पेटेंटोफिस"

पेटेंट कार्यालय (प्रधान कार्यालय),
निजाम पैलेस, द्वितीय बहुतलीय कार्यालय
भवन 5, 6 तथा 7वां तल,
234/4, आचार्य जगदीश बोस रोड,
कलकत्ता-700 020

भारत का अवशेष क्षेत्र

तार पता—"पेटेंट्स"

पेटेंट अधिनियम, 1970 या पेटेंट नियम, 1972 में अपेक्षित सभी आवेदन-पत्र, सूचनाएं, विवरण या अन्य प्रलेख पेटेंट कार्यालय के केवल उपयुक्त कार्यालय में ही प्राप्त किए जाएंगे।

शुल्क : —शुल्कों की अदायगी या तो नकद की जाएगी अथवा उपयुक्त कार्यालय में नियंत्रक को भुगतान योग्य धनादेश अथवा डाक आदेश या जहां उपयुक्त कार्यालय स्थित है, उस स्थान के अनुसूचित बैंक से नियंत्रक को भुगतान योग्य बैंक ड्राफ्ट अथवा चैक द्वारा की जा सकती है।

---

THE PATENT OFFICE

Calcutta, the 17th November 1990

APPLICATION FOR PATENTS FILED AT THE HEAD OFFICE 234/4, ACHARYA JAGADISH BOSE ROAD, CALCUTTA-20.

The dates shown in the crescent brackets are the dates claimed under section 135, of the Patents Act 1970.

The 8th October 1990

856/Cal/90 Ariel Industries Plc., Closure Locking Device and Tamper-Evident Closure. Convention date 13th Oct., 1989, (U.K.)

857/Cal/90 E.I. Du Pont De Nemours and Company, Halocarbon Hydrogenolysis.

858/Cal/90 Manus Coffey, and Norman Slack, A Device for picking up transporting and discharging containers of rufuse or other materials.

859/Cal/90 Manus Coffey, and Norman Slack, A Vehicle.

860/Cal/90 Westinghouse Electric Corporation, Improvements in or Relating to method and apparatus for cooling Shaft Seals.

The 9th October 1990

861/Cal/90 Henry Mark Billiot, Liquid Nitrogen to gas system.

862/Cal/90 Westinghouse Electric Corporation, "Apparatus and method for combustion turbine generator overfuel, limiting".

863/Cal/90 Westinghouse Electric Corporation. Improvements in or Relating to gas turbine control system having optimized ignition air flow control.

864/Cal/90 PKA Pyrolyse Kraftanlagen GmbH, Process for the Removal of Waste Materials.

The 10th October 1990

865/Cal/90 Sri Devapriya Mukerjee. Mini Bus with P.V. Cell and Maethanol/Hydrogen/Hydride/Fuel Cell for electric traction with Nickel cadmium Batteries.

866/Cal/90 Westinghouse Electric Corporation, Improvements in or Relating to microprocessor-Based Digital synchronizer System.

867/Cal/90 Westinghouse electric corporation. Improvements in or relating to replaceable longitudinal seal for a rotary combustor.

868/Cal/90 E. I. Du Pont De Nemours and Company, Polyoxymethylene/Thermoplastic Polyurethane/Amorphous Thermoplastic Polymer Blends.

869/Cal/90 Zip Heaters (Australia) Pty. Limited Float Chamber. Convention date 11th Oct., 1989 (Australia)

The 11th October 1990

870/Cal/90 Teijin Seiki Co., Ltd. A Yarn winding method.

871/Cal/90 Indian Jute Industries Research Association. Improvement in or relating to a method for spinning and flyer spinning system for spinning and the yarn spinned by the system.

The 12th October 1990

872/Cal/90 Imutran Limited, Modified Biological Material

873/Cal/90 Gerrard Abdool Rayman, Improvements in Blood Sampling (No. 8923210.2).

The 15th October 1990

874/Cal/90 The Babcock & Wilcox Company, Pulverized Coal flow monitor and control system.

875/Cal/90 International Paper Company, Method for Producing Bleached pulp with reduced total organically Bound chlorine and reduced Brightness Reversion.

876/Cal/90 Lanxide Technology Company L.P., Anti-Ballistic Materials and Methods of Making the same.

## APPLICATIONS FOR PATENTS FILED AT THE PATENT OFFICE BRANCH, 61, WALLAJAH ROAD, MADRAS-2.

The 17th September 1990

731/Mas/90 Himont Incorporated. Polymetallic catalysts, method of preparing and polymers produced thereby.

732/Mas/90 Sandoz Ltd. Improved dyeability of synthetic polyamide.

733/Mas/90 Usinor Sacilor, Roll for a device for the direct continuous casting of thin strips of molten metal.

734/Mas/90 Institut De recherches De La Siderurgie Francaise (IRSID en abrege). Process and device for the charging of materials into a furnace and the preheating of these.

735/Mas/90 British-American Tobacco Company Limited. Improvements relating to the processing of tobacco leaves. (September 18, 1989; United Kingdom).

736/Mas/90 British-American Tobacco Company Limited. Improvements relating to the processing of tobacco leaves. (September 18, 1989; United Kingdom).

737/Mas/90 Pillapalayam Narasimhachari Muralidharan. A novel torque wrench capable of pre-setting to specified torque values while tightening bolts or nuts.

The 18th September 1990

738/Mas/90 Interox Chemicals Limited. Hydrogen Peroxide Solutions. (October 5, 1989; Great Britain).

739/Mas/90 Maschinenfabrik Rieter AG. An extraction tube.

740/Mas/90 Maschinenfabrik Rieter AG. A roving guide.

741/Mas/90 Maschinenfabrik Rieter AG. Flyer for roving frame.

742/Mas/90 Vijiam Joshua. Water conveyor system for transporation.

743/Mas/90 Korea Research Institute of Chemical Technology. Quinolone compounds and a process for their preparation.

744/Mas/90 Korea Research Institute of Chemical Technology. Quinolone compounds and a process for their preparation.

745/Mas/90 Korea Research Institute of Chemical Technology. Diazabicycloamine compounds and a process for their preparation.

746/Mas/90 Indian Space Research Organisation. An improved process of electroslag refining or casting with inoculation.

747/Mas/90 Udayant Malhoutra. A clutch mechanism.

The 20th September 1990

748/Mas/90 Hoogovens Groep BV. Shaft furnace.

749/Mas/90 Union Oil Company of California. Hydraulic release oil tool.

750/Mas/90 Union Oil Company of California. Thickened fumigant compositions.

751/Mas/90 Sitraplast Construction (S) Plc Ltd., Solid state electric ballast.

752/Mas/90 Sandoz Ltd., Process and apparatus for mixing two fluids. (September 22, 1989; Great Britain).

The 21st September 1990

753/Mas/90 Carbon Implants Inc., Prosthetic heart valve.

754/Mas/90 Merlin Gerin. Electric circuit breaker with improved dielectric withstand. (Divisional to patent Application No. 186/Mas/87).

## OPPOSITION PROCEEDINGS

(1)

An opposition has been entered by M/s. Bajaj Auto Limited to grant of a patent on application No. 166247 (492/Del/86) dated 03rd June, 1986 made by Piaggio & C S P A.

(2)

The opposition entered by Samarpan Fabricators Limited to the grant of a patent on application No. 163792 made by Pradip Kumar Routh as notified in the gazette of India, Part III, Section 2 dated the 20th May, 1989 has been dismissed and it is ordered that a patent on application No. 163792 shall be sealed provided a request is made to that effect within the stipulated period.

## PATENTS SEALED

161556 165828 165831 165834 165840 165885 165925 165926 165927 165930 165936 165940 165947 165977 165986 165990 166004 166006 166017 166018 166019 166029 166036 166037 166038 166039 166054 166055 166068 166069 166080 166092 166100 166113 166115 166118 166144 166148 166149.

Cal—16

Del—13

Mas— 6

Bom— 4

## AMENDMENT PROCEEDINGS UNDER SECTION 57

Notice is hereby given that Anstalt Muza, of Gogoz 563 Balzers, a Liechtenstein Company, have made an application under Section 57 of the Patents Act, 1970 for amendment of application for Patent and specification of their application for Patent No. 157703 for "Heat exchanger for the progressive cooling of a hot gas stream in a casing."

The application for amendment and the proposed amendments can be inspected free of charge at Patent Office, 234/4, Acharya Jagadish Bose Road, Calcutta-700 017 or copies of the same can be had on payment of usual copying charges. Any person interested in opposing the application for amendment may file a notice of opposition on the prescribed form 30 within three months from the date of this notification at the Patent office, Calcutta. If the written statement of opposition is not filed with the notice of opposition it shall be left within one month from the date of filing the said notice.

## RESTORATION PROCEEDINGS

(1)

Notice is hereby given that an application for restoration of Patent No. 163977 dated the 17th February, 1986 made by Kali Prasad Poddar on the 2nd February, 1990 and notified in the gazette of India, Part III, Section 2 dated the 26th May, 1990 has been allowed and the said Patent restored.

(2)

Notice is hereby given that an application was made under Section 60 of the Patents Act, 1970 for the restoration of Patent No. 161572 granted to Harford Overseas Limited.

for an invention relating to "Combined plate and glass holder".

The patent ceased on the 27th October, 1989 due to non-payment of renewal fees within the prescribed time and the cessation of the patent was notified in the gazette of India, Part III, Section 2, dated the 22nd September, 1990.

Any interested person may give notice of opposition to the restoration by leaving a notice on Form 32, in duplicate, with the Controller of Patents, The Patent Office, "Nizam Palace", 2nd M.S.O. Building, 5th, 6th and 7th Floor, 234/4, Acharya Jagadish Bose Road, Calcutta-700 020 on or before the 17th January, 1991 under Rule 69 of the patents Rules, 1972. A written statement, in triplicate, setting out the nature of the opponent's interest, the facts upon which he bases his case and the relief he seeks, shall be filed with the notice or within one month from the date of the notice.

(3)

Notice is hereby given that an application was made under Section 60 of the Patents Act, 1970 for the restoration of Patent No. 162132 granted to Kochuzhathil Mathew Thomas and Kochuzhathil Thomas Mathew.

for an invention relating to "a process of manufacture of coconut pith sheets".

The patent ceased on the 12th January, 1990 due to non-payment of renewal fees within the prescribed time and the cessation of the patent was notified in the gazette of India, Part III, Section 2, dated the 22nd September, 1990.

Any interested person may give notice of opposition to the restoration by leaving a notice on Form 32, in duplicate, with the Controller of Patents, The Patent Office, "Nizam Palace", 2nd M.S.O. Building, 5th, 6th and 7th Floor, 234/4, Acharya Jagadish Bose Road, Calcutta-700 020 on or before the 17th January, 1991 under Rule 69 of the patents Rules, 1972. A written statement, in triplicate, setting out the nature of the opponent's interest, the facts upon which he bases his case and the relief he seeks, shall be filed with the notice or within one month from the date of the notice.

## COMPLETE SPECIFICATION ACCEPTED

Notice is hereby given that any person interested in opposing the grant of patents on any of the Applications concerned, may, at any time within four months of the date of this issue or within such further period not exceeding one month applied for on Form 14 prescribed under the Patents Rules, 1972 before the expiry of the said period of four months, give notice to the Controller of Patents on the prescribed Form 15, of such opposition. The written statement of opposition should be filed alongwith the said notice or within one month of its date as prescribed in Rule 36 of the Patents Rules, 1972.

The classifications given beow in respect of each specification are according to Indian Classification and International Classification.

A limited number of printed copies of the specifications listed below will be available for sale from the Government of India Book Depot, 8, Kiran Sankar Roy Road, Calcutta, in due course. The price of each specification is Rs. 2/- (postage extra if sent out of India). Requisition for the supply of the printed specifications should be accompained by the number of the specifications as shown in the following list.

Typed or photo copies of the specifications together with photo copies of the drawings, if any, can be supplied by the Patent Office, Calcutta on payment of the prescribed copying charges which may be ascertained on application to that office. Photo copying charges may be calculated by adding the number of pages in the specification and drawing sheets mentioned below against each accepted specification and multiplying the same by four to get the charges as the copying charges per page are Rs. 4/-.

## स्वीकृत सम्पूर्ण विनिर्देश

एतद्द्वारा यह सूचना दी जाती है कि सम्बद्ध आवेदनों में से किसी पर पेटेंट अनुदान का विरोध करने के इच्छुक कोई व्यक्ति, इसके निर्गम की तिथि से 4 महीने या अग्रिम ऐसी अवधि जो उक्त 4 महीने की अवधि की समाप्ति के पूर्व पेटेंट नियम, 1972 के तहत विहित प्रपत्र-14 पर आवेदित एक महीने की अवधि से अधिक न हो, के भीतर कभी भी नियंत्रक, एकस्व को ऐसे विरोध की सूचना विहित प्रपत्र-15 पर दे सकते हैं। विरोध सम्बन्धी लिखित वक्तव्य, उक्त सूचना के साथ अथवा पेटेंट नियम, 1972 के नियम 36 में यथाविहित इसकी तिथि के एक महीने के भीतर ही फाइल किए जाने चाहिए।

"प्रत्येक विनिर्देश के संबंध में नीचे दिए वर्गीकरण, भारतीय वर्गीकरण तथा अन्तरराष्ट्रीय वर्गीकरण के अनुरूप हैं।"

नीचे सूचीगत विनिर्देशों की सीमित संख्यक में मुद्रित प्रतियाँ, भारत सरकार बुक डिपो, 8, किरण शंकर राय रोड, कलकत्ता में विक्रय हेतु यथासमय उपलब्ध होंगी। प्रत्येक विनिर्देश का मूल्य 2-/ रु० है (यदि भारत के बाहर भेजे जाएं तो अतिरिक्त डाक खर्च)। मुद्रित विनिर्देश की आपूर्ति हेतु मांग पत्र के साथ निम्नलिखित सूची में यथाप्रदर्शित विनिर्देशों की संख्या संलग्न रहनी चाहिए।

रूपांकन (चित्र आरेखों) की फोटो प्रतियां, यदि कोई हों, के साथ विनिर्देशों की टैकित अथवा फोटो प्रतियों की आपूर्त्ति पेटेंट कार्यालय, कलकत्ता द्वारा विहित लिप्यान्तरण प्रभार उक्त कार्यालय से पत्र-व्यवहार द्वारा सुनिश्चित करने के उपरांत उसकी अदायगी पर की जा सकती है। विनिर्देश की पृष्ठ संख्या के साथ प्रत्येक स्वीकृत विनिर्देश के सामने नीचे वर्णित चित्र आरेख कागजों को जोड़कर उसे 4 से गुणा करके (क्योंकि प्रत्येक पृष्ठ का लिप्यान्तरण प्रभार 4/- रु० है) फोटो लिप्यान्तरण प्रभार का परिकलन किया जा सकता है।

CLASS : 65-$B_1$. 167551
Int. Cl. : F 01 f 27/28.

CORE AND WINDING ASSEMBLY FOR TRANSFORMES.

Applicant : LINGARAJ PATNAIK, AGRAHARAM STREET, P.O. CHATRAPUR, DIST. GANJAM, ORISSA, INDIA.

Inventor : LINGARAJ PATNAIK.

Application No. 763/Cal/1986 filed on October 21, 1986.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Calcutta.

4 Claims

A core and winding assembly for a three phase transfomer with a three limb core which is built up of core divisions; and that each core division is would continuously from coils of sheets of magnetic material, in a single stage or in several stages depending upon the lengths of the said sheets, into a substantially rectangular from with rounded corners; and that the straight sides the core divisions are so arranged as to form the three limbs of the entire core; and that there is a mould for electrical windings assembled around each limb from mould sections; and means for rotating the fitted mould on the core by means of an arrangement so that the insulated conductor from bobbins shall be would on the mould and thereby getting the wiring completed and that the mould is left in the core.

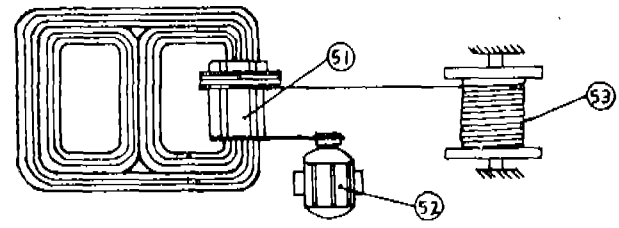



Fig. 5

Compl. Specn. 6 Pages. Drgs. 3 Sheets

CLASS : 93. 167552
Int. Cl. : C 05 c 1/02.

METHOD OF GRANULATING AMONIA BASED FERTILIZER.

Applicant : DALMIA INSTITUTE OF SCIENTIFIC & INDUSTRIAL RESEARCH, AT RAJGANGPUR, PIN-770017, DIST. SUNDARGARH, ORISSA, INDIA AND HARI FERTILIZERS LIMITED, AT P.O. SAHUPARI, DIST. VARANASI PIN-221009, UTTAR PRADESH, INDIA.

Inventors : (1) DR. JAJNYADATTA PANDA, (2) DR. NILACHAL SAHOO, (3) PABITRA SAHU.

Application No. 59/Cal/1987 filed on 20th January, 1987.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Calcutta.

5 Claims

Method of granulating ammonia based fertilizer such as described herein which comprises adding 0.2 to 6.0% by wt. of an additive such as, magnesite calcined to a temperature not less than 750°C and/or high alumina cement having not less than 40% $Al_2O_3$ and/or bentomite to the said fertiliser, adding 5 to 30% by wt. of water to the said mixture depending upon the original content of the fertiliser, and subjecting the resulting mass to granulating operation in any conventional granulator such as, Eirch granulator, Inclined Pen granulator, Disc granulator, Drum granulator and the like.

Compl. Specn. 6 Pages. Drgs. NIL.

CLASS : 146-C. 167553
Int. Cl. : G 01 d 1/00.

A PARTICLE SIZE MEASURING DEVICE FOR MEASUREMENT OF THE SIZE OF PARTICLES PRESENT IN A FLUID SUBSTANCE.

Applicant : COMBUSTION ENGINEERING, INC., 1000 PROSPECT HILL ROAD, WINDSOR, CONNECTICUT, UNITED STATES OF AMERICA.

Inventors : (1) JAMES MARTIN NIZIOLEK, (2) JAMES PHINAZEE SUTTON.

Application No. 96/Cal/1987 filed on January 30, 1987.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Calcutta.

14 Claims

A particle size measuring device for obtaining measurements of the size of particles that are present in a fluid substance comprising :

(a) a probe head portion having formed therewithin a sample path through which the fluid substance containing the particles to be measured passes;

(b) a light source operative for producing a beam of light cosisting of multiplicity of individual light rays;

(c) light conveying means optically coupled to said light source, said light conveying means being operative to convey the beam of light from said light source;

(d) a first focussing means mounted in said probe head portion so as to be positioned on one side of said sample path, said first focussing means being optically coupled to said light conveying means for receiving the beam of light therefrom, said first focussing means being operative to focuss the beam of light across said sample path such that the particles contained in the fluid substance present in said sample path such that the particles contained in the fluid substance present in said sample path are operative to cause a scattering of the individual light rays of the beam of light as the beam of light crosses said sample path;

(e) a second focussing means mounted in said probe head portion so as to be positioned on the other side of said sample path and so as to be aligned with said first focussing means, said second focussing means being operative to capture the light rays scattered in the course of the passage thereof across said sample path; and

(f) detector means optically coupled to said second focussing means for receiving the scattered and collimated light rays therefrom, said detector means being operative based on the intensity of the light of the scattered light rays received thereby to generate signals relating to the size of the particles that caused the light rays to be scattered while crossing said sample path.

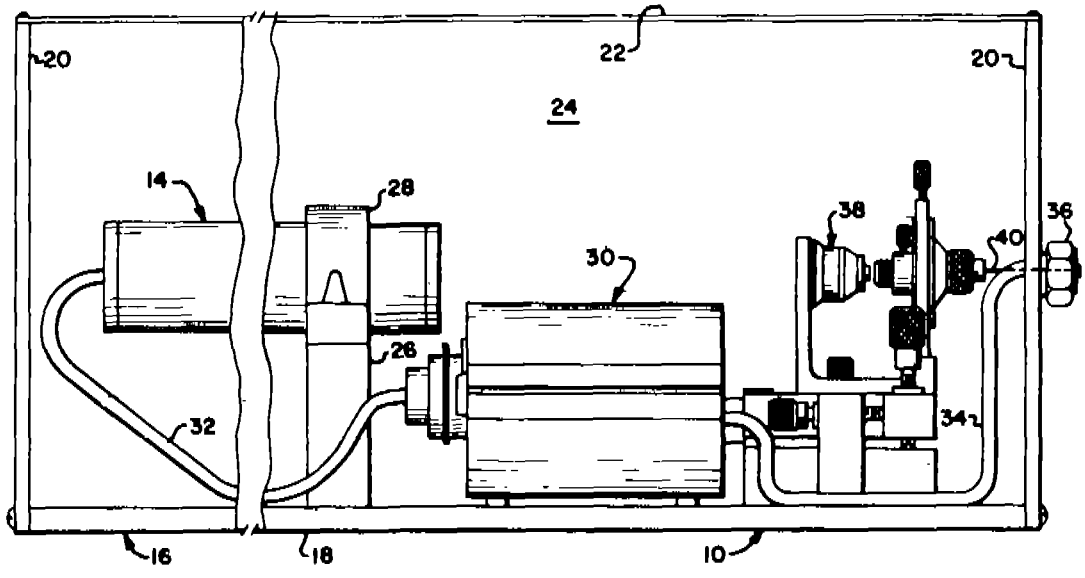



Fig. 1

Compl. Specn. 36 Pages. Drg. 1 Sheet.

---

CLASS : 157 D. 3 167554
Int. Cl. : E 01 b 37/00.

12 Claims

A TRAVELLING MACHINE FOR TAKING UP OR LAYING AND TRANSPORTING TRACK PANELS.

Applicant : FRANZ PLASSER BAHNBA UMASCHINEN-INDUSTRIEGESELLSCHAFT M.B.H., A-1010, WIEN, JOHANNESGASSE 3, AUSTRIA.

Inventor : (1) ING. JOSEF THEURER, (2) MANFRED BRUNNINGER.

Application No. 254/Cal/1987 filed on March 30, 1987.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Calcutta.

A travelling machine for taking up or laying and transporting track panels formed by rails and sleepers, consisting of at least one track panel carrier with rail gripping and holding units provided on the girder frame thereof for lighting and depositing the track panel with two pairs arranged one behind the other longitudinally of the track of hydraulic jacks which are arranged opposite one another transversely of the longitudinal axis of the track and which are designed for vertical displacement relative to, and for placement on, the track bed, characterized in that the two fixedly interconnected pairs (9.10) of hydraulic jacks are arranged for apart from one another on a girder frame (7) elongated longitudinally of the track panel carrier for high positional stability longitudinally of the track and in that an auxiliary waggon (6) designed to travel independently of the track panel carrier (5) is provided with a platform loading surface (21) to receive the track panel together with the track panel carrier (5), the auxiliary waggon (6) comprising an on-track undercarriage and an off track undercarriage (22, 23) at either end.

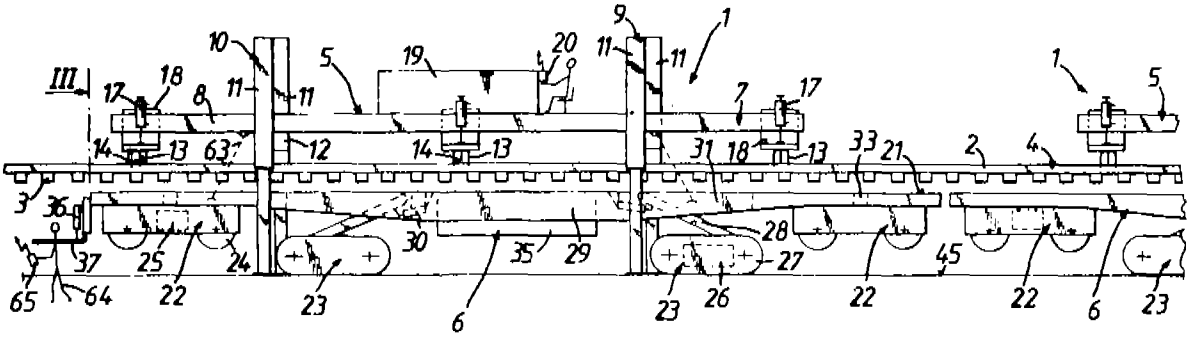


Fig. 1

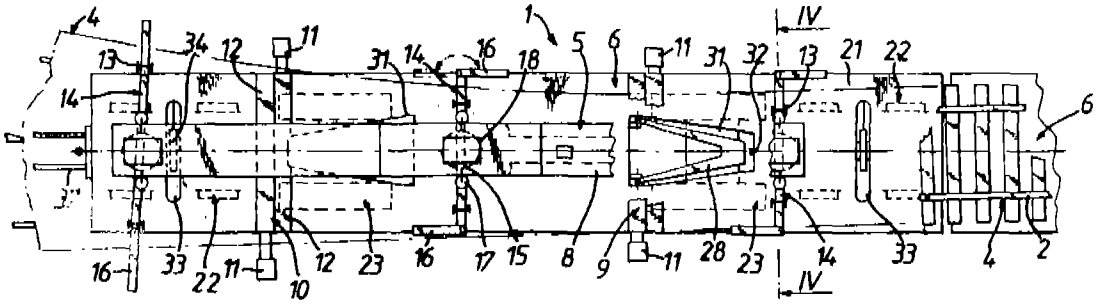


Fig. 2

Compl. Specn. 24 Pages. Drgs. 2 Sheets.

CLASS : 152-E. 167555
Int. Cl. : C 10 m 105/00; C 08 g 65/00.

PROCESS FOR PREPARING MICROEMULSIONS BASED ON PERFLUOROPOLYETHERS.

Applicant : AUSIMONT S.P.A., OF 31, FORO BUONAPARTE, MILAN, ITALY.

Inventors : (1) MARIO VISCA, (2) ALBA CHITTOFRATI.

Application No. 333/Cal/1987 filed on April 27, 1987.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Calcutta.

5 Claims

Process for preparing microemulsions based on perfluoropolyethers, of the type "oil in water" (O/W) or "Water in oil" (W/O), indefinitely stable within a determined temperature range, which comprises mixing :

—water,

—a perfluoropolyether having perfluoroalkyl end groups, in the proportion as herein described,

—a fluorinated surfactant, in amounts ranging from 126 to 400% by weight with respect to the oil in the O/W micro-emulsions and from 80% to 550% by weight with respect to the water in the W/O microemulsions.

Compl. Specn. 30 Pages. Drgs. 4 Sheets.

CLASS : 165-B, C; 60-D, F. 167556
Int. Cl. : D 05 b 15/00, 27/00, 31/00, 37/00.

GARMENT DESIGNER FOR MANUFACTURING GARMENTS.

Applicant : HARIPADA DOLAI, VILL. BAR-AMRITBERIA, P.O. MIRPUR, P.S. MAHISHADAL, DIST. MIDNAPORE, PIN-721648, WEST BENGAL, INDIA.

Inventor : HARIPADA DOLAI.

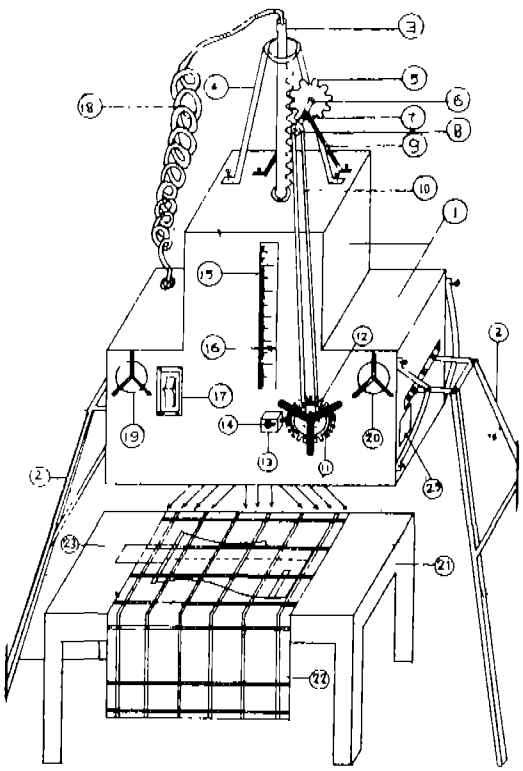
Application No. 377/Cal/1987 filed on May 11, 1987.

Complete Specification left on 10th May, 1988.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Calcutta.

6 Claims

A garment designer for manufacturing garments consisting of means for producing different sizes of shadow on a cloth which is placed on a table for making garments of different sizes and means for cutting the cloth according to the border of the shadowed portion wherein the said means for producing different sizes of shadows are provided with a source of light beam from the light source and shadow is formed on the cloth by a means of opaque film on which the design—to be produced on the cloth are drawn; means are provided for adjusting the distance between the source of light and the film for forming the different sizes of the shadows on the cloth and means are provided for wounding the film so that different designs come one after another for forming different types of shadows drawn on the opaque polythene belt which is advance either by manually or electrically operated motor characterised in that said means for adjusting the distance between the source of light and belt are provided with rack and pinion and the same is driven through a pulley provided on the front panel of the designer.



Compl. Specn. 8 Pages. Drgs. 3 Sheets.
Provl. Specn. 3 Pages. Drgs. NIL.

CLASS : 89 167557
Int. Cl. : G 01 n 29/04.

IMPROVEMENTS IN OR RELATING TO ULTRASONIC SIGNAL PROCESSING SYSTEM INCLUDING A FLAW GATE.

Applicant : WESTINGHOUSE ELECTRIC CORPORATION, OF WESTINGHOUSE BUILDING, GATEWAY CENTER, PITTSBURGH, PENNSYLVANIA 15222, UNITED STATES OF AMERICA.

Inventors : (1) LAWRENCE DARRELL NOTTINGHAM, (2) THOMAS ELISWORTH MICHAELS, (3) JENNIFER EMMONS MICHAELS.

Application No. 434/Cal/87 filed on June 2, 1987.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office Branch, Calcutta.

4 Claims

An ultrasonic signal processing system, comprising :

a control processor (10);

a timing control unit (26) connected to said control processor (10) and producing timing control signals including window signals;

a pulse control unit (28) connected to and controlled by said timing control unit (26);

an inspection transducer (20) connected to and controlled by said pulse control unit (28) and producing a received signal;

an analog multiplexer (32) connected to said timing control unit (26) and said inspection transducer (22), and attenuating the received signal in dependence on the window signals; and

a digitizer (34) connected to said analog multiplexer (32) and digitizing the attenuated received signal, characterized by

plural flaw gates (36–42), connected to said digitizer (34), said timing control unit (26) and said resolver, each adapted to store and process, the digitized attenuated received signals, in dependence on one of the window signals, by shifting a threshold waveform in dependence on a ranging offset by a transit time offset that is function of rotation position and indicates change in relative position of transducer and comparing the stored digitized attenuated received signals to the shifted threshold waveform and producing flaw indications when the digitized received signals exceeds the threshold waveform, and storing the position, said control processor (10) retrieving the flaw indications and corresponding position at the end of a scan by said inspection transducer (20) and determining flaw locations from the positions and flaw indications.

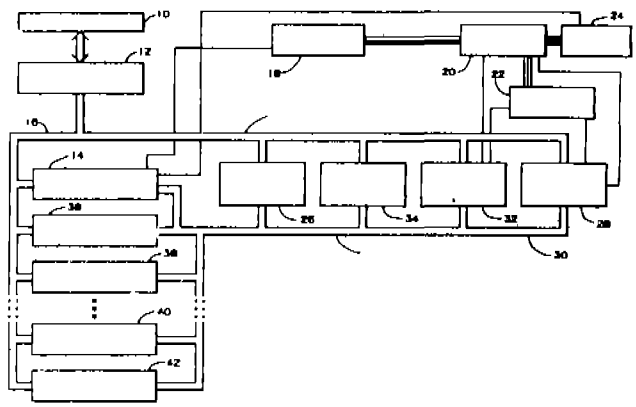


Fig. 1

Compl. Specn. 34 Pages. Drgs. 14 Sheets.

CLASS : 206-E. 167558
Int. Cl. : G 01 b 7/00.

A MONITOR FOR SENSING THE VARYING LINEAR DENSITY ALONG THE LENGTH OF A MOVING FIBROUS STRAND AND TEXTILE MACHINE INCORPORATING SAME.

Applicant : SPINLAB PARTNERS, LTD., OF 801 EAST MAIN STREET, RICHMOND, VIRGINIA 23219, UNITED STATES OF AMERICA.

Inventors : (1) NORBERT JOSEPH ACKERMANN, JR., (2) HOSSEIN MOAYED GHORASHI, (3) PEYMAN HOSSEINI DEHKORDI.

Application No. 436/Cal/87 filed on June 2, 1987.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office Branch, Calcutta.

12 Claims

A monitor for sensing the varying linear density along the length of a moving fibrous strand comprising :

a trumpet-like device having a throughput opening with an inside surface with which said strand frictionally engages as it passes through said opening in a compressed state;

a high frequency acoustical to electrical transducer coupled acoustically to said trumpet-like device for detecting the naturally occurring acoustically emitted signals generated by the friction between the fibers of said strand and between said strand and said inside surface of said trumpet as the strand passes in a compressed state through said trumpet, said transducer converting said acoustically emitted signals to an electrical signal which varies with the intensity of said acoustically emitted signals and which variation is proportional to the density of said fibrous strand; and

an electronic apparatus for receiving said varying electrical signal and indicating the variations in intensity of said emitted signal and thereby variations in density along the length of said fibrous strand.

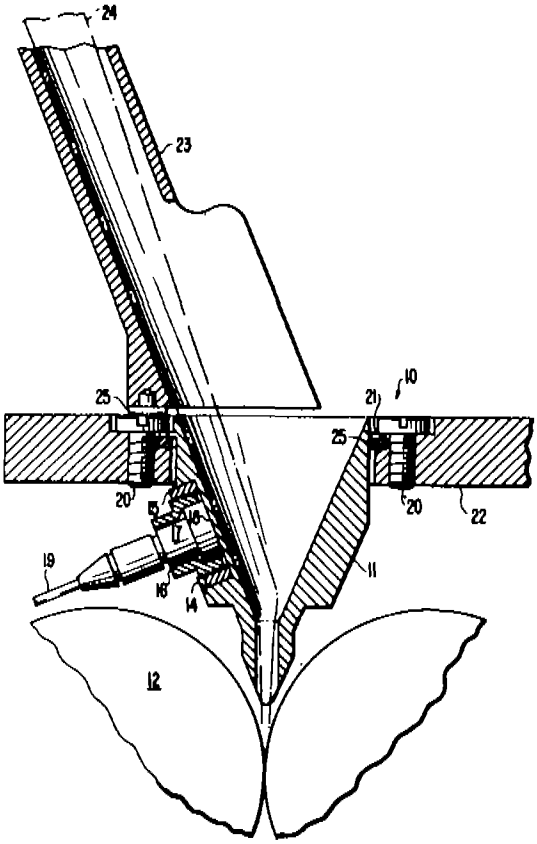



Fig. 1

Compl. Specn. 19 Pages. Drgs. 4 Sheets.

CLASS : 152-E. 167559
Int. Cl. : C 08 g 77/00; C 09 k 21/00.

IMPROVED FIREPROOF AND FLAME RETARDANT COMPOSITIONS AND PROCESS OF PRODUCING SAME.

Applicant & Inventor : JAE WOON KIM, OF 408-508, JUGONG 4TH APARTMENT, 896 MAETAN-DONG, SUWON, KYUNGGI-DO, KOREA.

Application No. 439/Cal/87 filed on June 3, 1987.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office Branch, Calcutta.

4 Claims

Fireproof and flame retardant composition comprising an admixture of the following in acertain ratios as given below :

*agent A* which is made by diluting a 1 : 1 mixture of calcium chloride and boric acid with 1-2 times as much water;

*agent B* a mixture made by mixing 35%—45% silicone resin, 35%—45% sodium silicate, and 10%—30% polyvinyl acetate resin; and

*agent C* made by mixing 50%—70% ammonium mono phosphate and 30%—50% silica gel;

wherein agents A and B are mixed at 1 : 1 to 2 : 1 ratio; and

wherein the mixture of agents A and B, is mixed with agent C at a 2 : 1 to 3 : 1 ratio.

Compl. Specn. 7 Pages. Drgs. NIL.

CLASS : 69-D1. 167560
Int. Cl. : H 01 h 1/00; 36/00.

AN ELECTROMAGNETICALLY ACTUATED SWITCHING DEVICE.

Applicant & Inventor : KAREL HAVEL, OF 15, KENSINGTON ROAD, APT. 704, BRAMALEA, ONTARIO, CANADA L6T 3W2, CANADA.

Application No. 478/Cal/87 filed on June 18, 1987.

(Convention dated May 19, 1987; No. 537, 350; CANADA).

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office Branch, Calcutta.

10 Claims

An electromagnetically actuated switching device, comprising in combination :

a sealed opaque enclosure having internal substantially non-reflecting surfaces;

a pair of contact elements extending through said enclosure and having contact ends inside of said enclosure adapted for engagement, at least one of said contact elements being movable between its first position, in which it closes an electrical path with the other contact element, and its second position, in which it opens said path, said movable contact element including a reflecting surface;

a multicolour light source disposed within said enclosure and adapted for directing a light beam on said reflecting surface of said movable contact element;

means for obtaining from said reflecting surface a reflected light beam having a direction in accordance with the position of said movable contact element;

means for determining the direction of said reflected light beam; and

means for controlling the colour of said light beam in accordance with the direction of said reflected light beam to thereby indicate the position of said movable contact element.

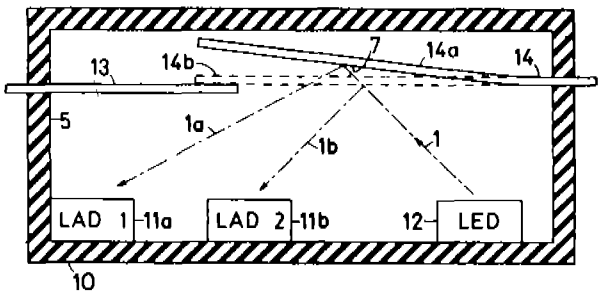



Fig. 1

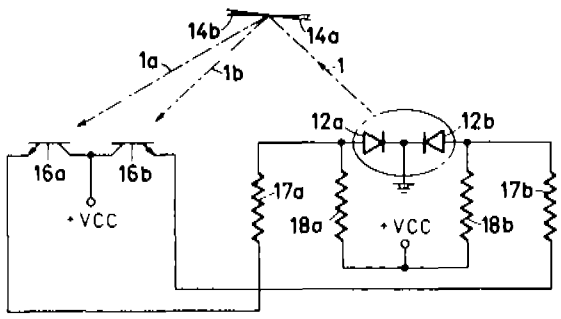



Fig. 2

Compl. Specn. 18 Pages. Drg. 1 Sheet.

CLASS : 40 H. 167561
Int. Cl. : B 01 d 46/00.

APPARATUS FOR THE PURIFICATION OF GASES.

Applicant : METALLGESELLSCHAFT AKTIENGESELLSCHAFT, OF REUTERWEG 14, D-6000 FRANKFURT AM MAIN, WEST GERMANY.

Inventors : (1) DIETER REICHEL, (2) RUDOLF JAKOBS, (3) LOTHAR BREHM, (4) GUNTER QUAB.

Application No. 518/Cal/87 filed on July 6, 1987.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office Branch, Calcutta.

7 Claims

An apparatus for the purification of gases at temperatures up to 900°C and under pressures up to 20 bars by means of gas-permeable cylindrical filter elements for collecting dust from gases, characterised in that :

(a) a pressure-resisting cylindrical housing (1), to which a conical dust-collecting bin (2) is joined at the bottom of the housing and which has a cambered cover (3) and a cylindrical top extension (4) and is provided on the inside with a heat-insulating brick liner (5) and on the outside with an insulation (6) and comprises a gas inlet (7) in its lower portion and an upper horizontal gas outlet (8) in its cylindrical top extention (4),

(b) a gas-tight pear-shaped inner housing (9), which is movably mounted in the housing (1) by means of a heat-insulating carrying structure (18 to 22) and is provided with a tubular gas outlet port (11) and comprises a cambered bottom (12), in which cylindrical filter elements (13) are secured, and

(c) a gas-tight compensator (14) disposed between the tubular gas outlet port (11) of the inner housing (9) and the gas outlet (8) of the housing (1).

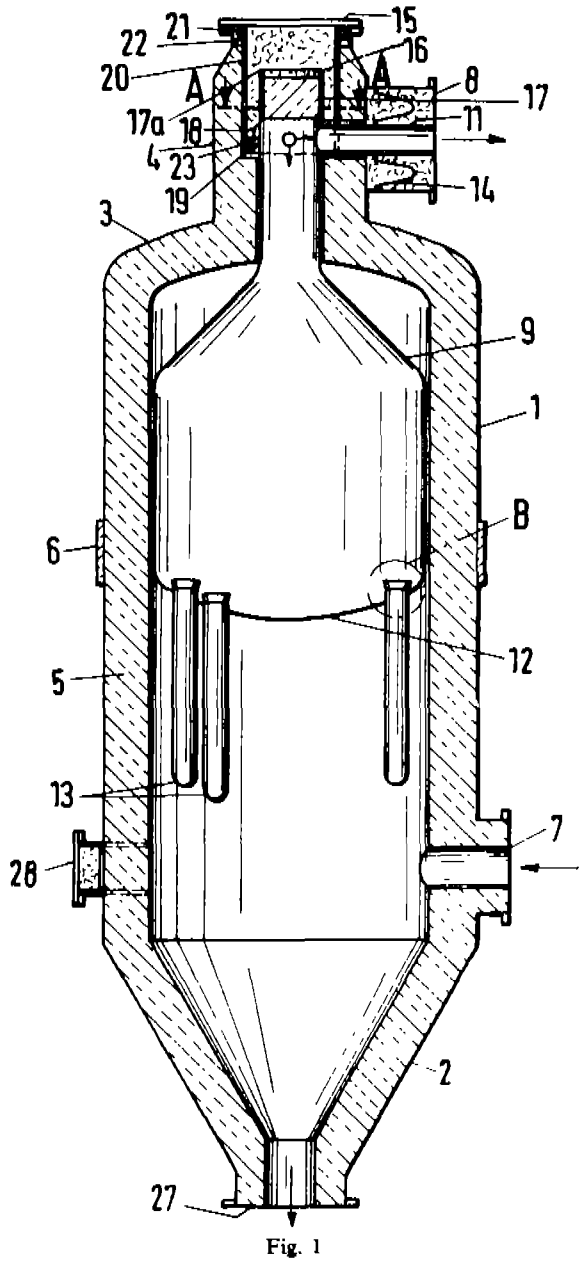



Fig. 1

Compl. Specn. 9 Pages. Drgs. 2 Sheets.

CLASS : 32-$F_{2(a)}$ 167562
Int. Cl. : C 07 d 239/48.

PREPARATION OF NOVEL SUBSTITUTED 2, 4-DIAMINO-5-BENZYLPYRIMIDINES, FOR USE AS MEDICAMENTS WITH AN ANTIMICROBIAL ACTIVITY

Applicant : SAARSTICKSTOFF-FATOL GmbH, OF ROBERT-KOCH-STRASSE, OF D-6685 SCHIFFWEILER, FEDERAL REPUBLIC OF GERMANY.

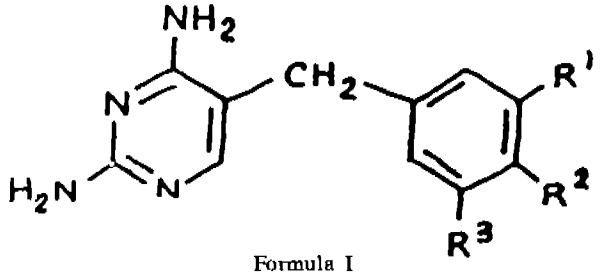
Inventors : (1) DR. JOACHIM K. SEYDEL, (2) MANFRED KANSY, (3) GERD HACHTEL, (4) DR. ROLF EUGEN HALLER.

Application No. 560/Cal/87 filed on July 21, 1987.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office Branch, Calcutta.

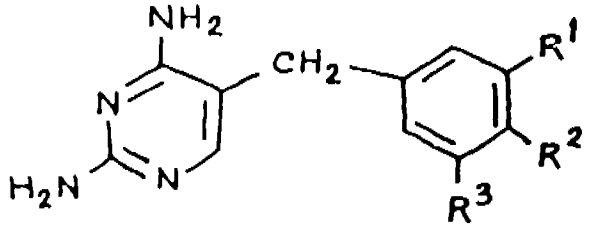
15 Claims

Process for the preparation of substituted 2, 4-diamino-5-benzyl-pyrimidines of general formula I of the accompanying drawings



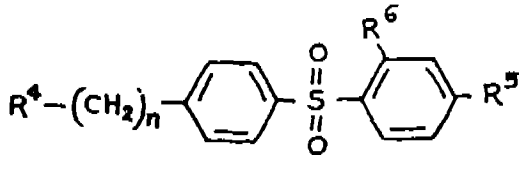
Formula I

wherein one of the substituents $R^1$ to $R^3$ is a 2', 4'-substituted phenyl-4-sulphonylphenyl aminoalkoxy, phenyl-4-sulphonylphenylamino-alkylthio, phenyl-4-sulphonyl-phenylalkoxy or phenyl-4-sulphonyl-phenylalkylthio group, in which the substituents in the 2', 4'-position are the same or different and are hydrogen, amino, alkylamino, dialkylamino, alkoxy, alkyl, nitro, alkylthio and/or acetamino groups wherein the alkyl radical has 1 to 6 carbon atoms in the chain and the two other of the substituents $R^1$ to $R^3$ are the same or different and are hydrogen, alkoxy, alkylthio and/or alkylamino groups, characterized in that a compound of general formula II,

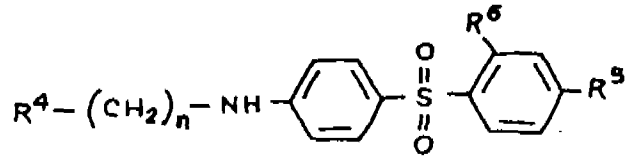


Formula II

in which one or the substituents $R^1$ to $R^3$ is a hydroxyl or a mercapto group and the two other or the substituents $R^1$ to $R^3$ are the same or different and are hydrogen, alkoxy, alkylthio and/or alkylamino groups is etherified in a known manner with a compound a general formula III or formula IV,



Formula III



Formula IV

in which $R^4$ is a halogen radical and $R^5$ and $R^6$ are the same or different and are hydrogen, amino, alkylamino, dialkylamino, alkoxy, alkyl, nitro, alkylthio and/or acetamino groups, said etherification being effected in a known manner using a solvent such as herein described at a temperature of between −20°C and the boiling point of the solvent used.

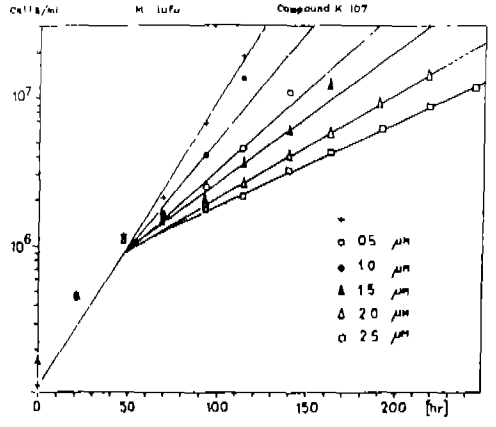



Fig. 1

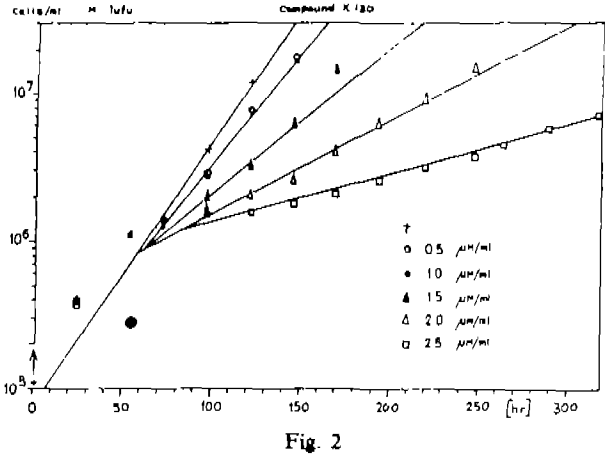



Fig. 2

Compl. Specn. 43 Pages. Drgs. 3 Sheets.

CLASS : 35-E. 167563
Int. Cl. : C 04 b 35/00.

METHOD OF PRODUCING A SELF-SUPPORTING CERAMIC STRUCTURE.

Applicant : LANXIDE TECHNOLOGY COMPANY, LP, TRALEE INDUSTRIAL PARK, NEWARK, DELAWARE 19711, U.S.A.

Inventors : (1) STANLEY J. LUSZCH, (2) HARRY R. ZWICKER.

Application No. 607/Cal/87 filed on August 4, 1987.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office Branch, Calcutta.

21 Claims

A method for producing a self-supporting ceramic structure comprising a polycrystalline material comprised of a first region and a terminal region integral with said first region is differing therefrom in at least one property selected from the group consisting of composition and microstructure, the method comprising the steps of :

(a) heating a parent metal such as herein described to a temperature range above its melting point but below the melting point of the oxidation reaction product to form a body of molten parent metal; and

(b) within said temperature range,

(i) reacting said body of molten parent metal with an oxidant such as herein described to form said oxidation reaction product,

(ii) initially maintaining at least a portion of said oxidation reaction product in contact with and between said body of molten parent metal and said oxidant to progressively transport molten parent metal from said body of molten parent metal through the oxidation reaction product and towards the oxidant so that oxidation reaction product continues to form at the interface between the oxidant and previously formed oxidation reaction product, thereby forming a progressively thicker first region of oxidation reaction product initially containing interconnected parent metal;
and

(d) after step (c) resuming a reaction between at least a portion of said interconnected parent metal from said first region of oxidation reaction product toward a surface of said first region to form oxidation reaction product on said surface and continuing said resumed reaction for a time sufficient to form a terminal region of oxidation reaction product so as to produce the desired product.

Compl. Specn. 30 Pages. Drgs. 7 Sheets.

CLASS : 89. 167564
Int. Cl. : G 01 b 11/16.

MICROBEND FIBER OPTIC STRAIN GAUGE.

Applicant : THE BABCOCK & WILCOX COMPANY, OF 1010 COMMON STREET, P.O. BOX 60035, NEW ORLEANS, LOUISIANA 70160, U.S.A.

Inventors : (1) JOHN WILLIAM BERTHOLD, (2) STUART EUGENE REED.

Application No. 645/Cal/87 filed on August 17, 1987.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office Branch, Calcutta.

8 Claims

A strain gauge operable in hostile environments comprising :

a pair of plates made of a material such as herein described having facing and offsetting corrugated surfaces and wherein at least one plate is attached to the material to be tested;

a first optical signal fiber clamped between the corrugations of the plates for being bent to a greater or lesser extent depending on pressure exerted on the plates for moving the plates together;

a reference optical signal fiber located in the vicinity of the plates so as to be simultaneously exposed to the same thermal and other conditions along its length as the first optical fiber;

optical signal applying means including a light source and light splitting means connected to one end of each optical fiber for simultaneously applying an optical signal to both optical fibers; and

optical detector means connected to the opposite ends of both optical fibers for measuring the modulations in the optical signal transmitted through the first optical fiber which modulations correspond to pressures applied to the plates and for reading the modulations in the optical signal transmitted through the reference optical fiber.

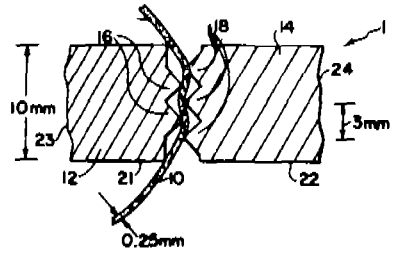



Fig. 1

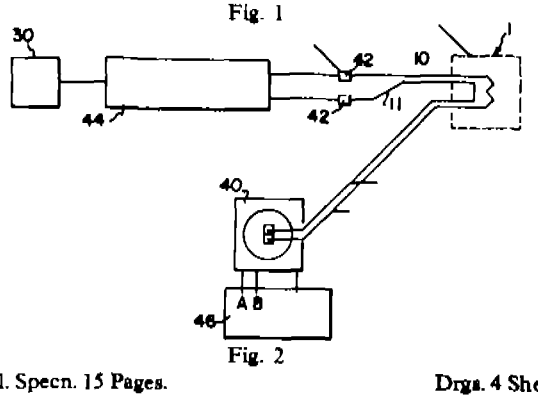



Fig. 2

Compl. Specn. 15 Pages. Drgs. 4 Sheets.

CLASS : 132 D 167565
Int. Cl. : D 21 c 5/02.

METHOD AND APPARATUS OF PREPARING AN INTIMATE MIXTURE OF A PLURALITY OF FLUENT SUBSTANCES.

Applicant : BELOIT CORPORATION, OF P. O. BOX 350, BELOIT, WISCONSIN 53511, UNITED STATES OF AMERICA.

Inventors : (1) BORJE FREDRIKSSON. (2) JEFFERY LOEL CHAMBERLIN.

Application No. 651/Cal/1987 filed on August 18, 1987.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

24 Claims

A method of preparing an intimate mixture of a plurality of fluent substances in a continuous flow-through passage having an entry end and a discharge end, and comprising :

combining in a manner such as herein described said plurality of fluent substances at said entry end in a continuously flowing stream filling said flow through passage under substantial hydrodynamic pressure;

subjecting said stream in said passage to turbulence and substantial dispersion and mixing effect of a series of alternating radially inwardly tapering relatively short and radially outwardly flaring longer generally conical turbulence surfaces;

effecting abrupt turbulent transition of the stream from one of said surfaces to the next of said surfaces in the series;

thereby attaining progressively more thorough dispersion and mixing of said substances in the continuously flowing stream from said entry end to said discharge end of said passage; and

discharging the thus treated stream from said discharge end of the passage to receiving means.

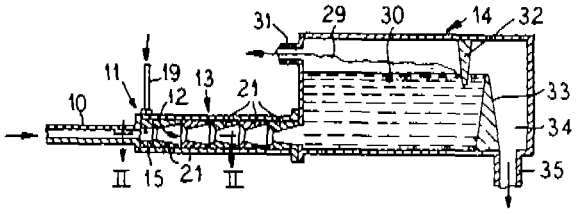



Fig. 1

Compl. Specn. 19 Pages. Drgs. 3 Sheets.

CLASS : 37-A. 167566
Int. Cl. : B 04 c 3/00.

CYCLONE SEPARATOR

Applicant : BWN VORTOIL LIMITED, 180 FLEET STREET, LONDON, EC4A 2NT, UNITED KINGDOM.

Inventors : (1) MARTIN THOMAS THEW, (2) IAN CHARLES SMYTHE.

Application No. 670/Cal/1987 filed on August 26, 1987.

(Convention dated August 27, 1986; No. 8620707 and November 28, 1986; No. 8628503; BOTH ARE U.K.)

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

9 Claims

A cyclone separator comprising

(a) an inlet portion (1) having generally the form of a volume of revolution, and one or more inlet channels (5),

(b) a vortex finder outlet (4) coaxial with the inlet portion (1) and projecting into the inlet portion (1),

(c) a generally axially symmetrical converging separation portion (2) adjacent to the inlet portion (1) and on the opposite side from the vortex finder outlet (4), characterised by the fact that the following relationships (i)—(v) apply wherein do is the minimum internal diameter of the vortex finder outlet (4) within $3d_2$ of the inlet plane or at its end if this is not within $3d_2$ of the inlet plane,

$d_1$ is the diameter of the cyclone in the inlet portion (1) where the feed enters, neglecting any inlet channel (5),

$d_2$ is the diameter of the cyclone wherein the inlet portion (1) joins the separation portion (2),

$d_3$ is the diameter of the cyclone where the separation portion (2) ends,

$d_{ix}$ is twice the radius at which flow enters the cyclone through the $x^{th}$ inlet,

$A_{ix}$ is the projected cross senctional area of the $x^{th}$ inlet measured at entry on the plane parallel to the cyclone axis which is normal to the plane also parallel to the cyclone axis which contains the component of the inlet centre line that is tangential to the circle of diameter $d_{ix}$

$$A_i = \sum_{x=1}^{n} A_{ix},$$

$$d_i = \frac{\sum_{x=1}^{n} d_{ix} A_{ix}}{A_i}, \quad \text{and}$$

is the half angle of convergence of the separation portion (2) as hereinbefore defined :

(i) $8 \quad \frac{\Pi d_2 d_1}{4A_i} \quad 16$

(ii) $1^\circ \quad 3^\circ$

(iii) $0.25 \quad \frac{d_o}{d_2} \quad 0.65$

(iv) $0.9\, d_1 \quad d_2$

(v) $0.9\, d_2 \quad d_1$

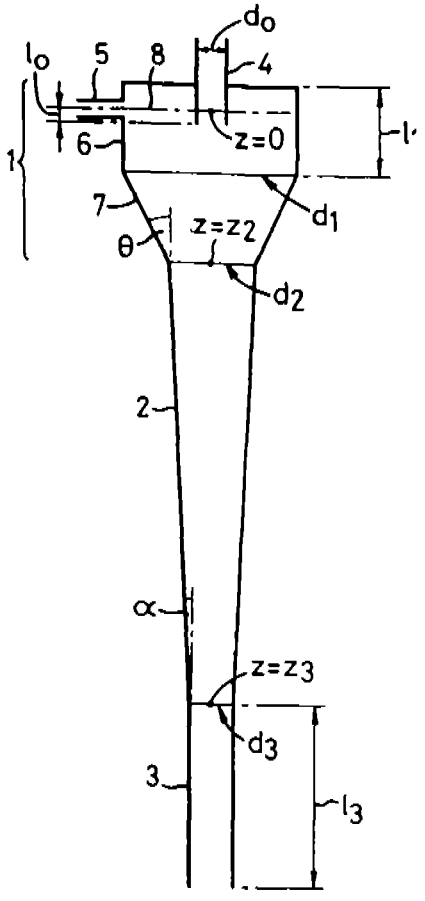



Fig. 1

Compl. Specn. 13 Pages. Drg. 1 Sheet.

CLASS : 179-G. 167567
Int. Cl. : F 16 j 12/00.

A PRESSURE VESSEL FOR THE STORAGE, PRODUCTION OR CONVEYANCE OF UNCOMPRESSED COLD GASES OR GASES COMPRESSED UNTIL LIQUIFACTION.

Applicant : DYCKERHOFF & WIDMANN AKTIENGESELLSCHAFT, OF ERDINGER LANDSTRASSE 1, 8000 MUNCHEN 81, WEST GERMANY.

Inventor : HELMUT BOMHARD.

Application No. 725/Cal/1987 filed on September 10, 1987.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

15 Claims

A pressure vessel for the storage, production or conveyance of uncompressed cold gases or gases compressed until liquifaction, having a spherical casing comprising a plurality of segments spaced apart from one another to form open joints, closed rings of tensioning members disposed in said segments adapted to be tensioned and maintained in said tensioned state by radial expansion of said vessel casing to cause a widening of the said open joints and fixing said expanded casing and said open joints by filler material.

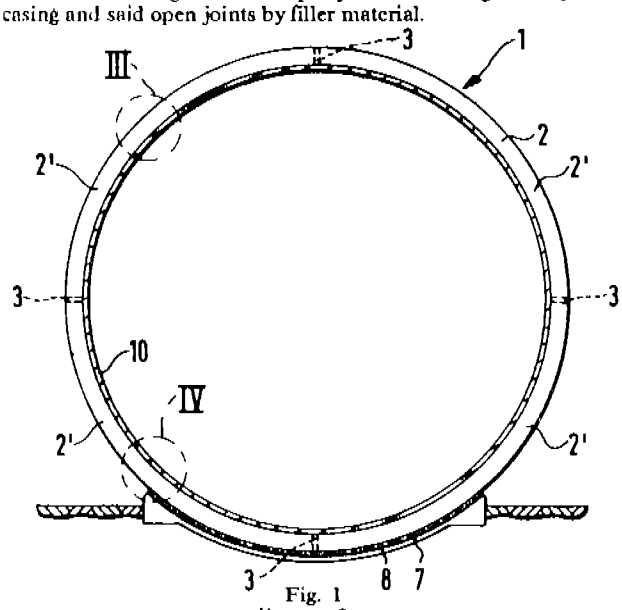



Fig. 1

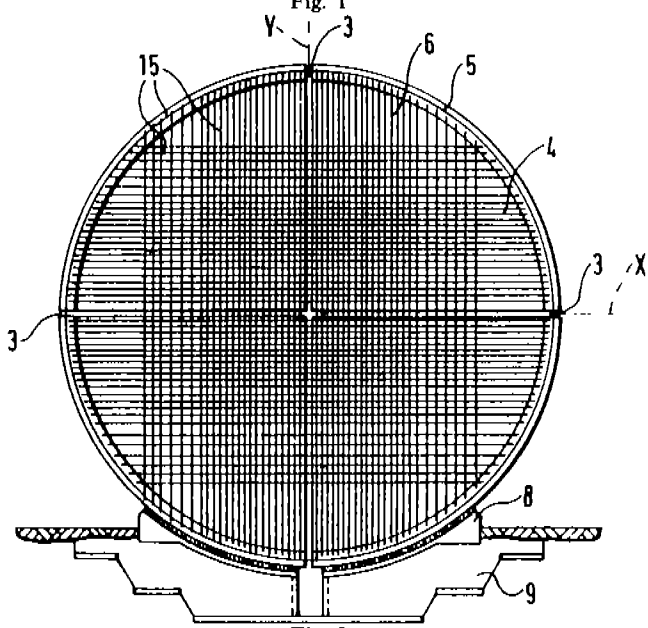



Fig. 2

Compl. Specn. 14 Pages. Drgs. 2 Sheets.

CLASS : 175, I & G 167568
Int. Cl. : F 22 g 5/12.

A STEAM TEMPERATURE CONTROL SYSTEM.

Applicant : THE BABCOCK & WILCOX COMPANY, OF 1010 COMMON STREET, P. O. BOX 60035, NEW ORLEANS, LOUISIANA 70160, U.S.A.

Inventor : DONALD JOSEPH DZIUBAKOWSKI.

Application No. 897/Cal/1987 filed on November 13, 1987.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Calcutta

9 Claims

A steam temperature control system for a heat exchanger wherein heat is exchanged between two heat carriers, comprising :

a regresser, for updating the values of coefficients in a multivariable non-linear regression equation due to changes in a system variables and for providing signals indicative of said updated coefficients;

means for generating a feed forward coolant flow set point signal F2c based upon said updated coefficients, corresponding to a calculated value Hc of the heat absorbed in one of the heat carriers from the other required to maintain the enthalpy of one of the heat carriers leaving the heat exchanger at a prederemined value; and

means under the control of said feed forward coolant flow set point signal F2c for adjusting the heat absorption in said one of said heat carriers.

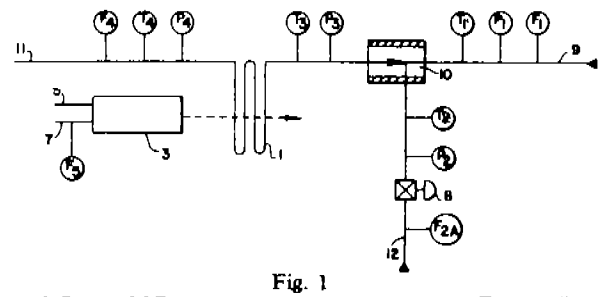



Fig. 1

Compl. Specn. 16 Pages. Drgs. 2 Sheets.

CLASS : 101-D; 125-B; 156-G. 167569
Int. Cl. : G 01 f 3/00; 23/00.

A DEVICE FOR DELIVERING WATER FROM A HIGHER LEVEL TO A LOWER LEVEL.

Applicant & Inventor : RAM SWARUP SINGH, OF INDUSTRIAL ESTATE, DALTONGANJ-822101, BIHAR, INDIA.

Application No. 127/Cal/1988 filed on February 12, 1988.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Calcutta.

7 Claims

A device for delivering water from a higher level to a lower level comprising of a first hollow vertical body of spun pipe well type provided with an inlet opening or duct adapted to be connected with the water source at the upper end of the said body and an outlet opening or duct at the lower end of the said body for the discharge of the water entering the said body, said outlet opening or duct being fitted with a connecting pipe whose other end is fitted to a second hollow vertical body of spun pipe well type of a shorter height with the inlet opening or duct of the said second hollow vertical body being provided at the lower end and the outlet opening or duct of the second hollow vertical

body is provided at the upper end such that the excessive pressure in the water source present at the inlet end of the first hollow vertical body is considerably reduced at the discharge end of the said second hollow vertical body by providing the said openings or ducts of the lower level of the said first and second hollow vertical bodies above the base level of the respective bodies in order to absorb the impact of the water falling from the higher level in the volume of water collected in between the base and the lower level of the said opening or duct in the said first and second vertical hollow bodies.

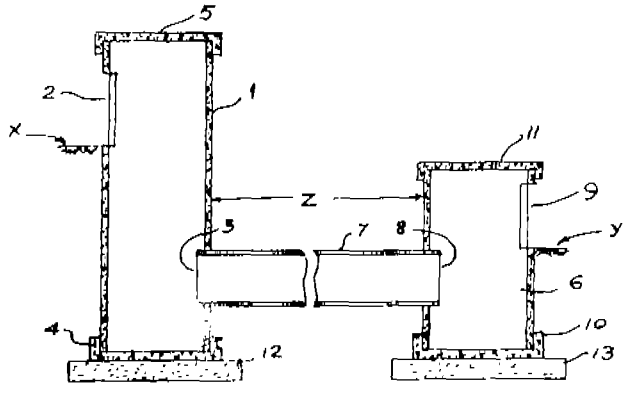



Fig. 2

Compl. Specn. 15 Pages. Drg. 1 Sheet.

CLASS : 128-K. 167570
Int Cl. : A 61 b 1/00, 1/30.

AN ENDOSCOPIC DEVICE.

Applicant : TRYLON ASSOCIATES LTD., OF 26214 ATHENA AVENUE, HARBOUR CITY, CALIFORNIA-90710, UNITED STATES OF AMERICA.

Inventor : NEAL MARC LONKY.

Application No. 816/Cal/1988 filed on October 03, 1988.

[Divisional out of No. 172/Cal/85, Anti-dated to March 06, 1985].

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Calcutta.

8 Claims

An endoscopic device comprising a main body and a plurality of dilator members extending from said body, channel like engaging means provided in at least one of said dilator members for releasebly engaging thereto a medical examination light/illuminating device comprising a cheimiluminescent light producing means adapted to be removably secured to said endoscopic instrument and provided with an adhesive layer for attachment to said endoscopic instrument, said chemiluminescent light producing means comprising a light transmitting body having reactive chemiluminescent light producing material as herein described, a portion of the outer surface of which body is adapted to fit the contour of said endoscopic instrument, said portion provided with said adhesive, said device being adapted to direct its light intermediate said dilator members in their extended position.

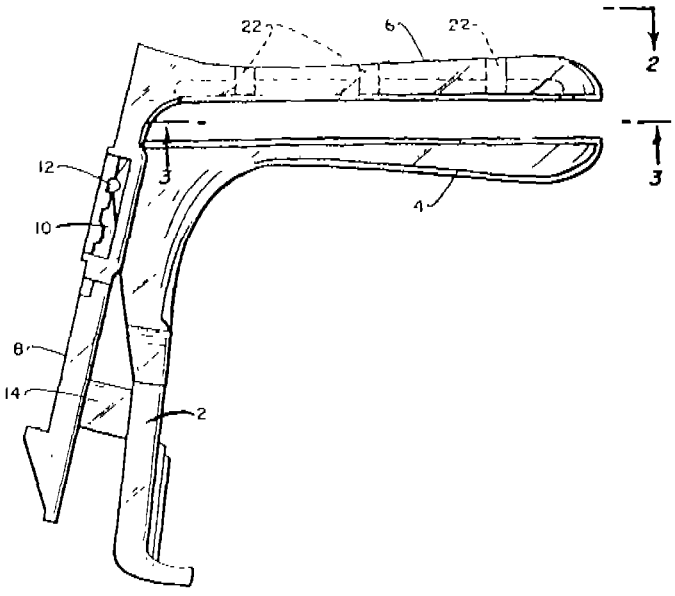



Fig. 1

Compl Specn. 19 Pages. Drgs. 5 Sheets.

Ind Cl : 148 H [GROUP XXXVIII (3)] 167571
Int. Cl.[4] : G 03 D 15/02.

A FILM DRIER.

Applicant : NATIONAL REMOTE SENSING AGENCY, BALANAGAR, HYDERABAD-500 037, ANDHRA PRADESH, INDIA, A SOCIETY DULY ORGANISED AND EXISTING UNDER THE LAWS OF THE UNION OF INDIA.

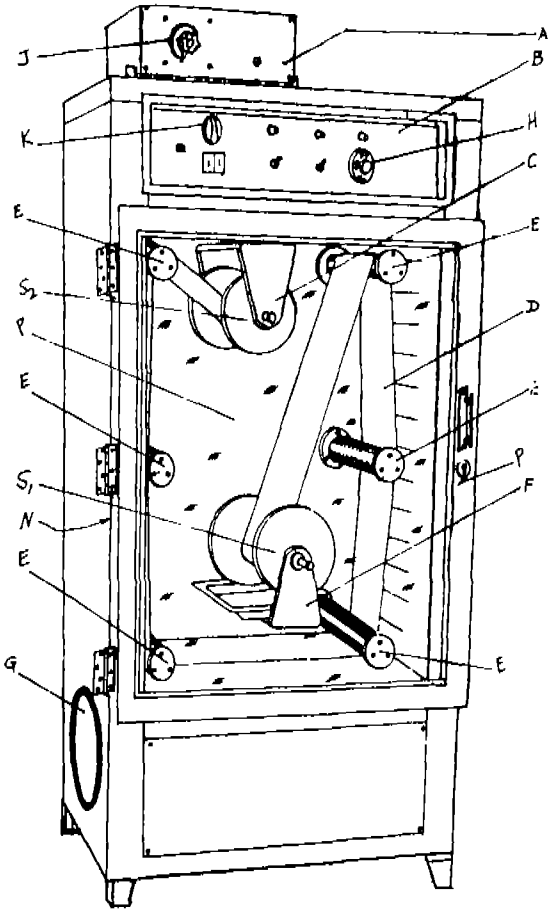
Inventors : (1) BULUSU LAKSHMANA DEEKSHATULU, (2) YELLAPPA SANBAMURTHY, (3) TAMMBATHULA SESHA RAO.

Application No. 443/Mas/86 filed on 9th June, 1986

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office Branch, Madras.

5 Claims

A film drier comprising a closed chamber provided with a door; a heater and blower unit disposed below the chamber and communicating therewith through perforations on the inner surface of the chamber, the heated air from the said unit entering the chamber before leaving the same through an exit provided therefor; a first mounting for receiving a film-spool and a second mounting, driven by a motor, for receiving a take-up spool, the film from the film-spool being passed around a plurality of spaced rollers housed within the chamber before being would on the take up spool, so as to expose the surface of the film to the heated air within the chamber; and means for controlling the speed of the motor and the temperature within the chamber, whereby the film is dried as it runs from the film-spool to the take-up spool at a predetermined speed while being subjected to heated air at a predetermined temperature.




Compl. Specn. 7 Pages. Drg. 1 Sheet.

Ind. Cl. : 85 J [GROUP XXXI] 167572
Int. Cl.[4] F 23 J 1/02.

AN APPARATUS FOR TRANSPORTATION OF FURNACE WASTES TO A DUMPING PLACE.

Applicant : POLITECHNIKA SLASKA IM. WINCENTEGO PSTROWSKIEGO UL. KRZYWOUSTEGO 7, 44-101 GLIWICE, POLAND, A POLISH COMPANY.

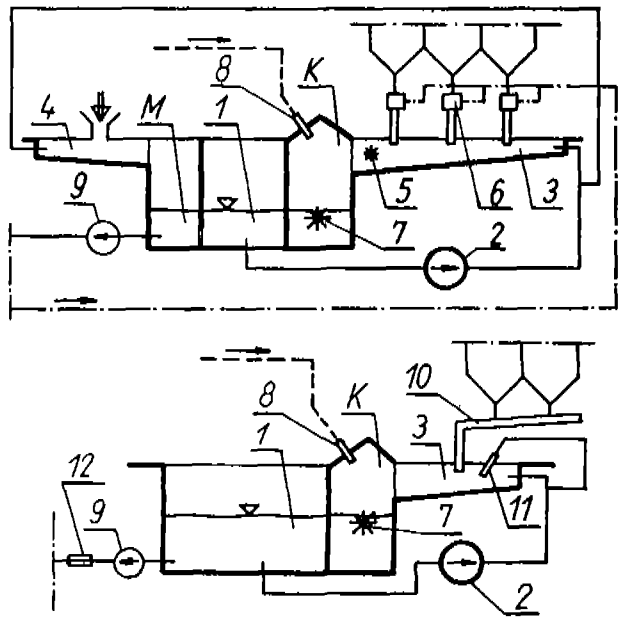
Inventor : (1) JERZY ROKITA, (2) MACIEJ ZARZYCKI, (3) WLADYSLAW WILGUSIEWICZ.

Application No. 486/Mas/86 filed on 24th June, 1986.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office Branch, Madras.

3 Claims

An apparatus for transportation of furnace waste to a dumping place comprises a retention tank (1) for the ash-water mixture, with at least one gravity channel (3, 4) having mixing device (5, 11) in it, and a covered chamber (K) with a mixer (7) and water spray nozzles (8); a pump (9) for pumping the ash-water mixture from retention tank to dumping place through pipelines; and a recirculating pump (2) for circulating the ash-water mixture from retention tank through the said gravity channel.




Compl. Specn. 11 Pages. Drgs. 2 Sheets.

Ind. Class : 50D [GROUP VII(1)] 167573
Int. Cl.[4] : F 24 F 13/08.

IMPROVED AIR VENT FOR AIR CONDITIONING SYSTEMS.

Applicant : ATLAS AIR AUSTRALIA PTY. LIMITED, A COMPANY INCORPORATED UNDER THE LAWS OF THE STATE OF NEW SOUTH WALES, OF 133 VICTORIA ROAD, ROZELLE 2039, NEW SOUTH WALES, COMMONWEALTH OF AUSTRALIA.

Inventor : LEWIS MARTON.

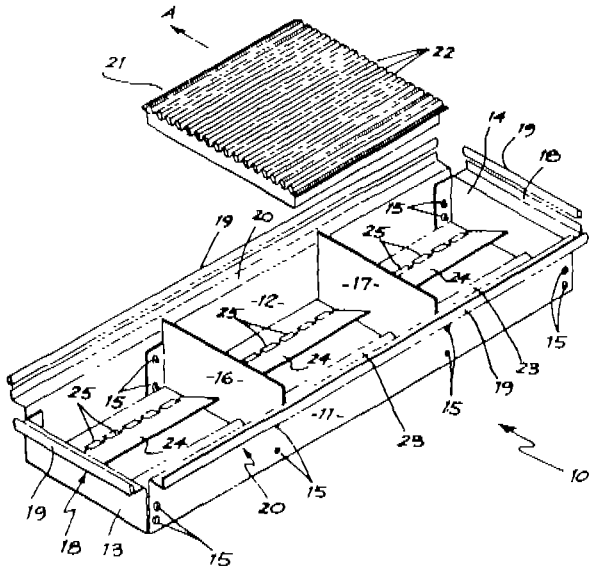
Application No. 541/Mas/86 filed on July 15, 1986.

Convention date : November 22, 1985; (No. PH 3541; AUSTRALIA).

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Madras Branch.

9 Claims

A modular air vent assembly comprising a rectangular frame having four closed sides, the frame being divided into a plurality of square sections by dividing plates located along the length of the assembly to separate the air flow of each section from its adjacent section and each section being provided with air damper means and a grill removably supported at the top of the respective section of the vent assembly, the vent assembly with support means adapted to rest on a supporting surface of a raised modular floor assembly, and each grill having louvres angled to direct air flow therethrough to one side and the grill locatable in any one of a plurality of orientations such that air flow is directed in any one of a plurality of directions relative to the vent assembly, each direction corresponding to a respective orientation of the grill.



Compl. Specn. 9 Pages. Drgs. 3 Sheets.

Ind. Cl. : 40-F-[GROUP-IV(1)] 167574
Int. Cl.[4] : B 04 C 3/04.

APPARATUS AND PROCESS FOR SOLIDS-FLUID SEPARATION.

Applicant : SHELL INTERNATIONALE RESEARCH MAATSCHAPPIJ B.V., A NETHERLANDS COMPANY, OF CAREL VAN BYLANDTLAAN 30, 2596 HR, THE HAUGE, THE NETHERLANDS.

Inventor : PETER HADDON BARNES.

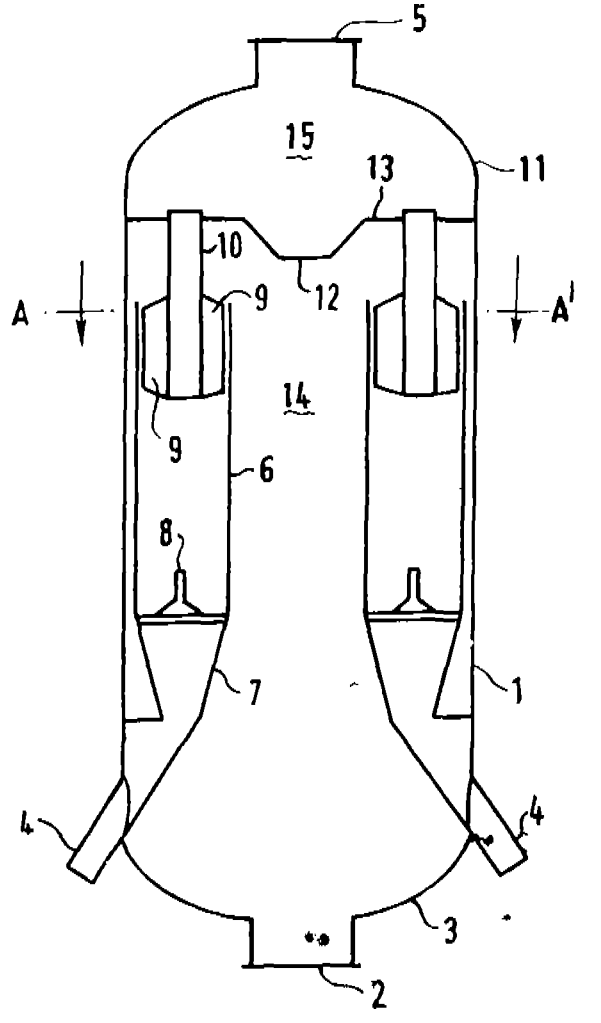
Application No. 839/Mas/86 filed on October 27, 1986.

Convention date : October 28, 1985; (No. 85 26540; Great Britain).

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Madras Branch.

13 Claims

Apparatus for solids-fluid separation which comprises a plurality of substantially vertical tubular elements in a housing, inlet means arranged in the bottom section of the housing and communicating with the space between the tubular elements and the housing, a plurality of tubular fluid outlet means of which the lower sections are arranged substantially co-axially within the upper sections of said tubular elements defining annular spaces wherein swirl imparting means are arranged and of which fluid outlet means the upper sections co-operate with opening(s) in the upper section of the housing, and solids outlet means communicating with the lower sections of the tubular elements and with opening(s) in the bottom of the housing.



Compl. Specn. 14 Pages. Drgs. 3 Sheets.

Ind. Cl. : 22,99-E [GROUP XL (2), XL (4)] 167575
Int. Cl.[4] : B 65 D 23/00.

AN UNOVERTURNABLE CONTAINER FOR RECEIVING LIQUIDS.

Applicant : GUIFFRAY MICHEL, OF 136, RUE VULFRAN WARME, 80000 AMIENS, FRANCE, A FRENCH NATIONAL.

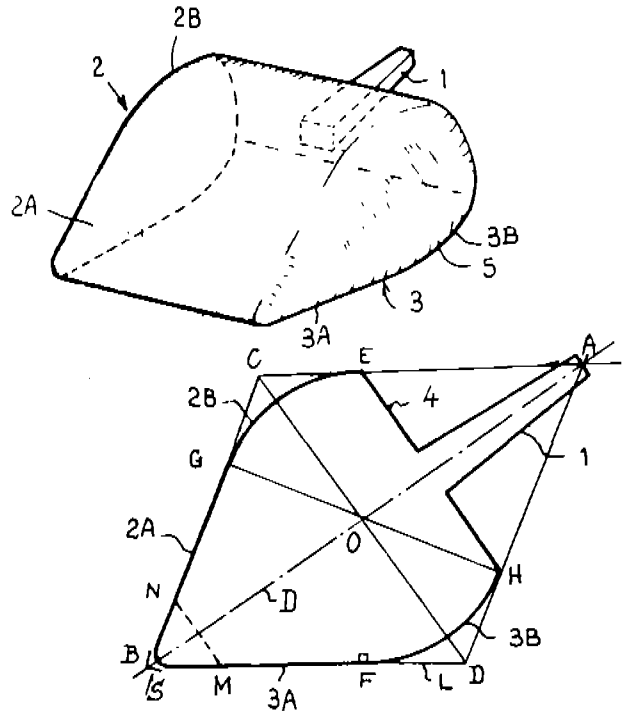
Inventor : IDEM.

Application No. 907/Mas/86 filed on 25th November, 1986.

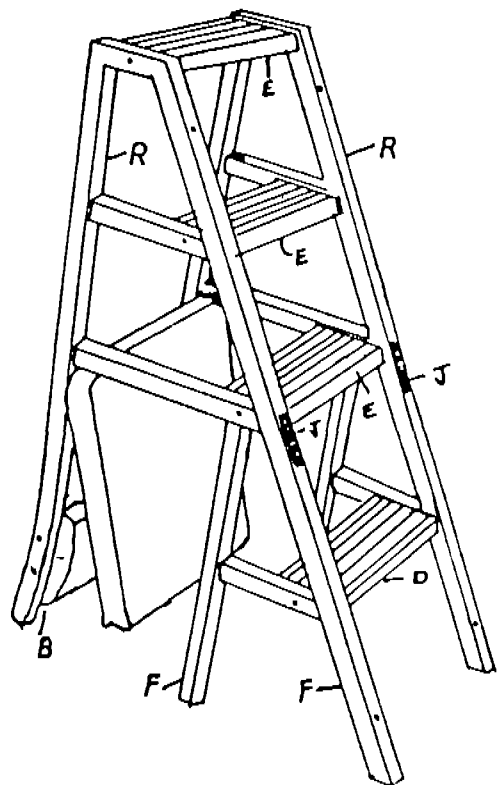
Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office Branch, Madras.

7 Claims

An unoverturnable container for receiving liquids comprising a neck, an opening in the neck for expelling the liquid, two sides each comprising a planar bearing portion and a rounded portion connected to the planar portion and to the neck, the two planar portions forming a dihedron, and rounded lateral portions interconnecting said two bearing portions.




Compl. Specn. 14 Pages. Drgs. 3 Sheets.




Comp. Specn. 6 Pages. Drg. 1 Sheet.

Ind. Cl. : 86A, B & E [GROUP LXVI(4)] 167576
Int. Cl[4] : A 47 C 13/00; 15/00.

A COMBINED BOOKSHELF, CHAIR AND STEPLADDER.

Applicant & Inventor : ILLIPARAMBIL MANUEL JOS, ILLIPARAMBIL HOUSE, 47/631, KALOOR, COCHIN 682 017, KERALA, INDIA, INDIAN NATIONAL.

Application No. 977/Mas/86 filed on December 16, 1986.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Madras Branch.

5 Claims

A combined bookshelf, chair and stepladder comprising front and rear members pivotably jointed to each other, the said front and rear members, in their normal position, being in close juxtaposition to provide a seat and a backrest serving as a chair, the said seat being supported on the front and rear members in the said normal position; one or more footrests fixed to each of the front and rear members, said footrests in the said normal position providing shelves for placing books thereon, the rear member, when fully pivoted over the front member, resting on the ground, supported by the backrest while the footrest or footrests of the rear member are raised above the footrest or footrests of the front member to provide a stepladder.

Int. Cl. : 68-E & A-[GROUP-LVII (3)] 167577
Int. Cl[4]-G 05 F 1/625; 5/00.

A DEVICE FOR RESTRICTING ELECTRIC POWER CONSUMPTION AND FOR PROVIDING PROTECTION AGAINST SHORT-CIRCUITS AND RELATED FAULTS.

Applicants & Inventors : (1) KRISHNAN SOUNDARA SRINIVASAN, 6/4, MIG FLATS, 11TH AVENUE, ASHOK NAGAR, MADRAS-600 083, TAMIL NADU, INDIA, INDIAN NATIONAL AND (2) MRS. CHANDRA SATHYANATHAN, PLOT NO. 26, KANAKASABAI COLONY, KOYAMBEDU, MADRAS-600 117, TAMIL NADU, INDIA, INDIAN NATIONAL.

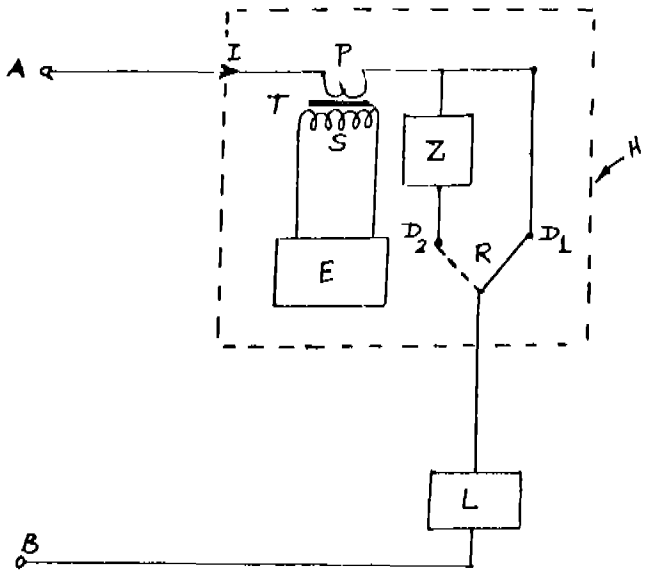
Application No. 726/Mas/87 filed on 9th October, 1987.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Madras Branch.

8 Claims

A device for restricting electric power consumption and for providing protection against short-circuits and related fautls comprising a current transformer, the primary thereof for connetion to the phaseline of an alternating current power supply, the secondary thereof being connected to an electronic relay-actuator incorporating a relay provided in the phase line; and a bypass impedance, the said relay having a normal operative position for connecting the phase

line to the load and a second operative position for connecting the said impedance in series with the load whereby as long as the phase current is the primary is within predetermined values, the actuator is inoperative, but whenever the said current attains a higher value, the actuator senses the correspondingly higher current in the secondary and actuates the relay to occupy its second operative position.




Compl. Specn. 12 Pages. Drg. 1 Sheet.

Ind. Cl. : 32-F-2(a)-[GROUP-LX(1)] 167578
Int. Cl.[4] : C 07 C 103/30.

A PROCESS FOR PREPARING GROWTH PROMOTING COMPOUND FOR ANIMALS.

Applicant : COMETEC S.R.L., AN ITALIAN COMPANY, OF VIA BIGLI, 21 MILANO, ITALY.

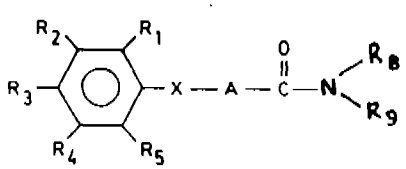
Inventors : (1) ALDO GARZIA, (2) UMBERTO BUCCI.

Application No. 515/Mas/88 filed on 19th July, 1988.

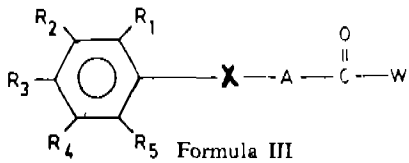
Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Madras Branch.

2 Claims

A process for the preparation of growth promoting compounds for animals of the formula I of the accompanying drawing wherein $R_1$, $R_2$, $R_3$, $R_4$ and $R_5$, are the same or different, each selected from the group consisting of hydrogen, alkyl radical having 1 to 4 carbon atoms, alkoxy radical having 1 to 4 carbon atoms and halogen; X is selected from carbonyl and a ketal group of the formula VI of the accompanying drawing wherein $R_6$ and $R_7$ are the same or different, each selected from hydrogen and alkyl radical having 1 to 3 carbon atoms; a is a linear or branched alkylene radical having 1 to 8 carbon atoms;

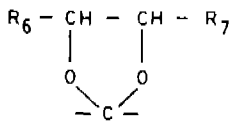


Formula I



Formula III

$R_8$ and $R_9$ are he same or different, each selected from the group consisting of hydrogen, alkyl radical having 1 to 4 carbon atoms and 2-hydroxyalkyl radical having 2 to 4 carbon atoms; or $R_8$ and $R_9$, together with the nitrogen atom, from an heterocyclic ring with the proviso that X is a ketal group and A is ethylene, the group $NR_8R_9$ is a group other than morpholino which comprises recting a compound of the formula III of the accompanying drawing wherein $R_1$ to $R_5$, A and X are as defined above, and W is selected from OH, halogen and group -O-CO-O-$R_{10}$, wherein $R_8$ and $R_9$ are as defined above in a molar ratio of 1 : 2 to 1 : 3, or with an equimolecular quantity of such an amine in the presence of and acceptor of acids, and in the presence of dicyclohexyl-carbodiimide in in the case that W = OH.



Formula VI

Compl. Specn. 25 Pages. Drg. 1 Sheet.

Ind. Cl. : 55D-2 [GROUP LXI(1)] 167579
Int. Cl.[4] : A 01 N 59/02.

A METHOD FOR FORMING A HERBICIDAL COMPOSITION.

Applicant : UNION OIL COMPANY OF CALIFORNIA, A CORPORATION OF THE STATE OF CALIFORNIA, UNITED STATES OF AMERICA, OF 461, SOUTH BOYLSTON STREET, LOS ANGELES, CALIFORNIA 90017, UNITED STATES OF AMERICA.

Inventor : DONALD CLIFFORD YOUNG.

Application No. 519/Mas/88 filed on 20th July, 1988.

Divisional to Patent No. 163760 (628/Mas/86), (Antedated to : August 8, 1986.)

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Madras Branch.

12 Claims

A method for forming a herbicidal composition which comprises reacting sulfuric acid with glyphosate and a chalcogen compound of the formula $R_1$-CX-$R_2$ wherein X is selected from oxygen and sulfur, $R_1$ and $R_2$ are independently selected from hydrogen, monovalent organic radicals having upto 10 carbon atoms, $NR_3$ $R_4$ and $NR_5$, at least one of $R_1$ and $R_2$ being $NR_3$ $R_4$ or $NR_5$, $R_3$ and $R_4$ are independently selected from hydrogen and monovalent organic radicals having upto 10 carbon atoms and $R_5$ is a divalent organic radicals having upto 10 carbon atoms wherein the molar ratio of glyphosate to sulfuric acid is from 0.1 to 10 and the molar ratio of the chalcogen compound to sulfuric acid is from 0.1 to 2.0.

Compl. Specn. 31 Pages. Drg. 1 Sheet.

Ind. Cl : 39 K [GROUP III] 167580
Int. Cl⁴ : C 01 B 11/20.

PROCESS AND APPARATUS FOR PRODUCING HYPOBROMOUS ACID.

Applicant : COGENT LIMITED, OF TEMPLE COURT, 11 QUEEN VICTORIA STREET, LONDON EC4N 4 TP, ENGLAND.

Inventor : ALAN ATKINSON.

Application No. 735/Mas/88 filed on 24th October, 1988.

Convention dated 27th October, 1987 No. 8725164 (United Kingdom).

Appropriate Office for Opposition Proceedings (Rule 4. Patents Rules, 1972), Patent Office Branch, Madras.

16 Claims

A process for producing hypobromous acid by electrolysing a solution containing both chloride and bromide ions, characterised in that

(i) the molar ratio of chloride : bromide ions initially is in the range of 4 : 1 to 20 : 1 and

(ii) said molar ratio, the rate of electrolysis and the period of electrolysis are selected so as to result in a yield of hypobromous acid of at least 75% of the theoretical yield, based on the initial concentration of bromide ion.

Compl. Specn. 23 Pages. Drgs. 5 Sheets.

Ind. Cl. : 39 L. 167581
Int. Cl⁴ : C01G 49/06.

A METHOD FOR THE PREPARATION OF HIGH-PURE SYNTHETIC IRON (III) OXIDE OF FERRITE GRADE.

Applicant : COUNCIL OF SCIENTIFIC AND INDUSTRIAL RESEARCH, RAFI MARG, NEW DELHI-1, INDIA AN INDIAN REGISTERED BODY INCORPORATED UNDER THE REGISTRATION OF SOCIETIES ACT (ACT XXI OF 1860).

Inventor : TURAGA PRABHAKARA PRASAD.

Application for the Patent No. 498/Del/86 filed on 4th June, 1986.

Appropriate Office for Opposition Proceedings (Rule 4, Patent Rule 1972), Patent Office Branch, New Delhi-5.

3 Claims

A process for the production of high purity synthetic iron (III) oxide of ferrite grade which comprises removing the impurities present in the starting hydrated iron (II) salt solution by their co-precipitation with hydrated iron (III) oxide by treating the hydrated iron (II) oxide with air-ammonia mixture in a fresh distilled water filtering the mixture, treating the filtrate again with air-ammonia mixture to precipitate synthetic iron (III) hydrate oxide, filtering, washing, drying, roasting at a temperature between 500-700°C & pulverising the residue.

Compl. Specn. 8 Pages. Drg. NIL.

Ind. Cl. : 195 E 167582
Int. Cl. : F16K 11/00

MULTIPORT VALVE.

Applicant : UOP INC., A CORPORATION ORGANIZED UNDER THE LAWS OF THE STATE OF DELAWARE IN THE UNITED STATES OF AMERICA, WITH ITS PRINCIPAL PLACE OF BUSINESS LOCATED AT TEN UOP PLAZA, ALGONQUIN & MT. PROSPECT ROADS, DES PLAINS, ILLINOIS-60016, U.S.A.

Inventors : DAVID LEE SCHICK, GARY MICHAEL SCHUMANN & CHARLES ARTHUR DOLEJS.

Application for Patent No. 582/Del/86 filed on 2nd July, 1986.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office Branch, New Delhi-5.

7 Claims

(a) A stator assembly (12, 86) having a hollow interior with a plurality of conduits (26, 32, 34, 36) connected to it, and being comprised of a stator cylindrical element (12) and a stator discular element (86) which is joined to end of the stator cylindrical element (12) the stator discular element (86) having a stator transverse surface that faces outward with respect to the stator cylindrical element is part of the stator discular element and is perpendicular to an axis of rotation of rotor assembly a plurality of internal stator passages arranged circularly centered on the axis of rotation each passage extending from the transverse surface to an exterior surface of the stator discular element and communicating with one of said conduits and a plurality of stator ports in the stator cylindrical element communicating with said conduits;

(b) said rotor assembly being adapted to rotate about said axis of rotation to different positions relative to said stator assembly by a previously determined degrees of rotation and said rotor assembly being comprised of a rotor cylindrical element located substantially inside the hollow interior of said stator cylindrical element to form an annular volume between the rotor cylindrical element and said stator cylindrical element a rotor discular element joined to an end of the rotor cylindrical element and having a rotor transverse surface perpendicular to said axis of rotation facing inward with respect to the rotor cylindrical element and forms a transverse volume between said rotor transverse surface and said stator transverse surface and a plurality of interior rotor assembly channels being equal in number to said plurality of conduits, each channel extending from said rotor transverse surface to the exterior surface to the rotor cylindrical element.

(c) means such as herein described in said annular volume for defining fluid flow paths across said annular volume between said channels and said stator prots; and

(d) means such as herein described in said transverse volume for defining fluid flow paths across said transverse volume between said stator passages and said rotor channels.

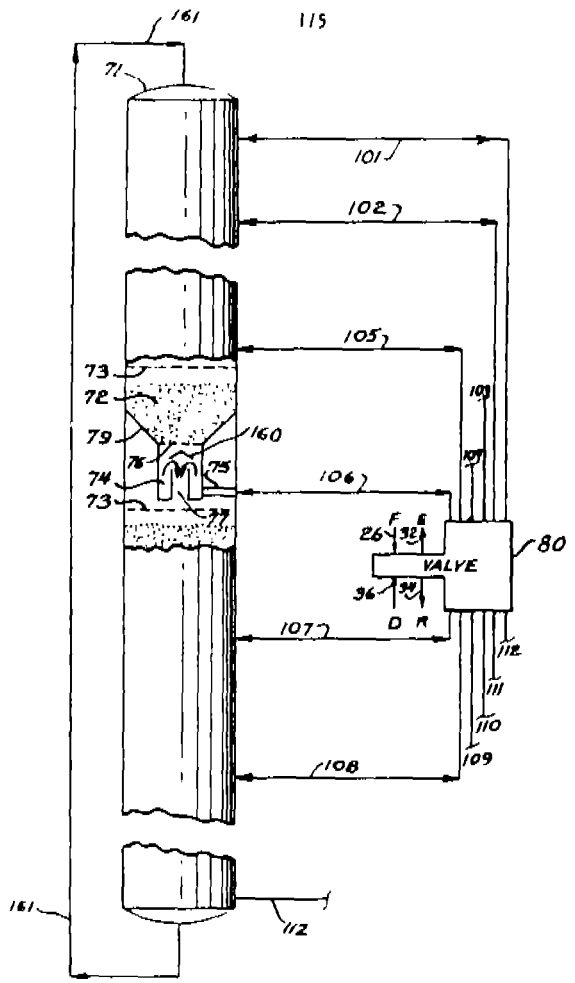



Fig. 1

Compl. Specn. 20 Pages. Drgs. 5 Sheets.

Ind. Cl. : 144 E 127 A 167583
Int. Cl.[4] : F 16D 13/00

DRIVEN PLATE FOR A CLUTCH AND METHOD FOR THE MANUFACTURE OF SUCH DRIVEN PLATE.

Applicant : FERODO LIMITED, A COMPANY ORGANISED UNDER THE LAWS OF GREAT BRITAIN. OF 20 ST. MARY'S PARSONAGE, MANCHESTER M3 2NL, ENGLAND.

Inventors : ROY GEOFFREY EAST & JOHN DAVID HARDING.

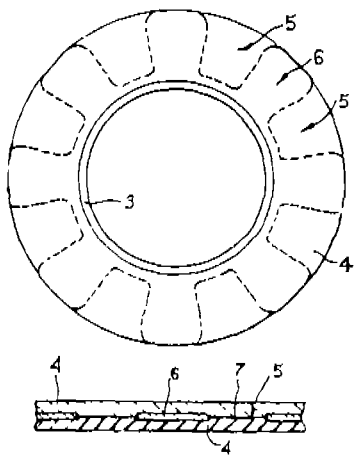
Application for Patent No. 585/Del/1986 filed on 2nd July, 1986.

Convention Date July 16, 1985/8517930.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office Branch, New Delhi-110 005.

13 Claims

A driven plate for a clutch which comprises a castellated core plate with a pair of annular facings of friction material bonded one to each side of said core plate with the radially outer ends of the castellations of the core plate not being enclosed by the friction material of the annular facings, said friction material extending into the gaps between consecutive castellations whereby the inwardly directed surfaces of said annular facings contact each other within said gaps to provide matual facing support to each other while remaining substantially unbonded to each other.




Compl. Specn. 13 Pages. Drg. 1 Sheet.

Ind. Cl. : 85R. 167584
Int. Cl.[4] : F27B 1/26.

A CONTROL SYSTEM FOR A VERTICAL SHAFT KILN.

Applicant : NATIONAL COUNCIL FOR CEMENT AND BUILDING MATERIALS, M-10, SOUTH EXTENSION, PART-II RING ROAD, NEW DELHI-110049.

Inventors : HOSAGRAHARA CHANDRASEKARAIAH VISVESVARAYA SUSHANTA CHATTERJEE & ASHWANI PAHUJA.

Application for Patent No. 720/Del/86 filed on 8th August, 1986.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-110 005.

7 Claims

A control system for a vertical shaft kiln capable of providing nodules of a uniform size and having a constant moisture content, said control system comprising means for controlling and regulating the flow of water into the nodulizer, means for controlling the flow of air into the kiln for combustion and means for controlling the level of fuel admixed in the bed in the kiln, a microprocessor controller (C) severally interconnected to above mentioned means for providing the corresponding corrective output signals for controlling the operation of the said respective means.

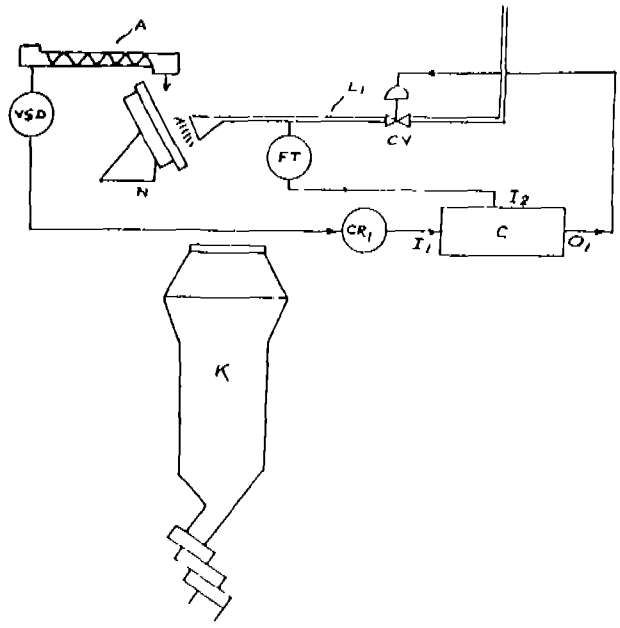



Fig. 1

Compl. Specn. 12 Pages. Drgs. 4 Sheets.

Ind. Cl. : 6 B 1 167585
Int. Cl.[4] : F25J 3/00, B01D 51/00.

PROCESS FOR CRYOGENIC AIR SEPARATION INTO ITS COMPONENT GASES AND AN AIR DISTILLATION SYSTEM FOR CARRYING OUT THE PROCESS.

Applicant : L'AIR LIQUIDE, SOCIETE ANONYME POUR L'ETUDE ET L'EXPLOITATION DES PROCEDES GEORGES CLAUDE, A FRENCH BODY CORPORATE, OF 75, QUAI D ORSAY-75007 PARIS (FRANCE).

Inventor : JEAN-RENAUD BRUGEROLLE

Application for Patent No. 620/Del/86 filed on 14th July, 1986.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office Branch, New Delhi-110 005.

19 Claims

A process for cryogenic air separation into its component gases, comprising : a main distillation step in which cooled feed air is supplied to a main distillation zone to produce a first stream of gaseous nitrogen which may be impure but is substantially without argon, and a second stream of liquid oxygen which may be impure but is substantially without argon; withdrawing a third stream substantially constituted by argon and oxygen from an argon tapping point of said main distillation zone, and producing therefrom an impure argon stream; sending said first stream to the bottom or base of a first mixing zone and said second stream to the top of a second mixing zone; sending to the bottom or base of the second zone at least a part of the top vapour of the first zone and to the top of the first zone at least a part of the liquid produced at the base of the second zone; effecting between the base of the first zone and the top of the second zone at least one intermediate withdrawal which constitutes a residual gas or from which is produced such a gas, which gas is a mixture of nitrogen and oxygen comprising about 10 to 30% oxygen; recovering from the top of the second zone impure oxygen containing at the most a few % nitrogen; and recovering from the base of the first zone poor liquid constituted by nitrogen containing at the most a few % oxygen, and sending said poor liquid as reflux to the main distillation zone.

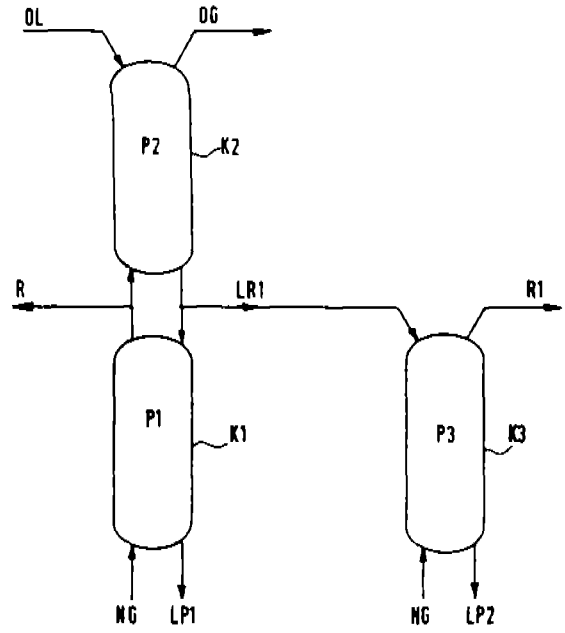



Fig. 1

Compl. Specn. 27 Pages. Drgs. 9 Sheets.

Ind. Cl. : 40 B. 167586
Int. Cl.[4] : C 08 F 210/2.

A PROCESS FOR PURIFYING COPOLYMERS.

Applicant : SHELL INTERNATIONALE RESEARCH MAATSCHAPPIJ B.V., A NETHERLANDS COMPANY, OF CAREL VAN BYLANDTLAAN 30, 2596 HR THE HAGUE, THE NETHERLANDS.

Inventor : JOHANNES ADRIANUS MARIA VAN BROEKHOVEN.

Application for the Patent No. 975/Del/86, filed on 5th November 1986.

Appropriate Office for the Opposition Proceedings (Rule 4, Patent Rule, 1972), Patent Office Branch, New Delhi-110005.

7 Claims

A process for purifying copolymers of carbon monoxide and ethene and optionally other olefinically unsaturated hydrocarbons prepared under conventional polymerization conditions in the presence of a palladium phosphine catalyst of the kind such as herein described to remove catalyst remnants therefrom, said process comprising, preparing a suspension of said copolymers in an organic liquid of the kind such as herein described and contacting said suspension with carbon monoxide at a carbon monoxide partial pressure of at least 0.1 bar and at a temperature of at least 60°C, said temperature being at least 20°C higher than the temperature at which the polymerization had been effected.

Compl. Specn. 14 Pages. Drgs. NIL.

Ind. Cl. : 32 $F_{2(b)}$ 167587
Int. Cl[4] : CO7D 239/02 & 239/04.

PROCESS FOR THE PREPARATION OF 5-(3-POLYCYCLOALKOXY-4-ALKOXY PHENYL) HEXAHYDRO 2-PYRIMIDONES.

Applicant : PFIZER INC., A CORPORATION ORGANISED UNDER THE LAWS OF THE STATE OF DELAWARE, UNITED STATES OF AMERICA, OF 235 EAST 42ND STREET, NEW YORK, STATES OF NEW YORK, UNITED STATES OF AMERICA.

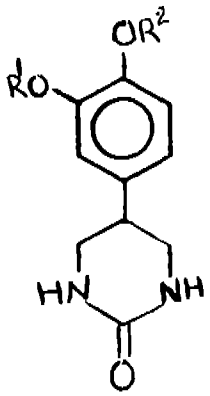
Inventors : NICHOLAS ALEX SACCOMANO & FREDRIC JAMES VINICK.

Application for Patent No. 107/Del/87 filed on 11th February, 1987.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office Branch, New Delhi-110 005.

4 Claims

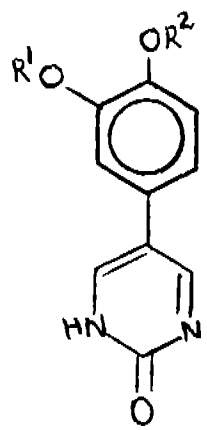
A process for the preparation of 5-(3-polycycloalkoxy-4-alkoxyphenyl) hexahydro-2-pyrimidinones of Formula (I-i)



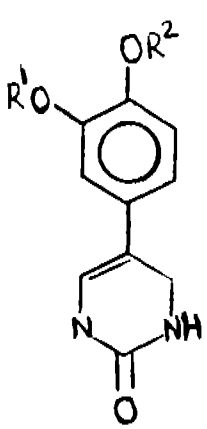
Formula (I-i)

its pharmaceutically acceptable acid addition salt wherein $R^1$ is polycycloalkyl having from 7 to 11 carbon atoms; and

$R^2$ is methyl or ethyl which comprises reducing a compound having the formula (I-g) or (I-h)



Formula (I-g)



Formula (I-h)

in a reaction-inert solvent in the presence of hydrogen and a metal catalyst to produce said compound of Formula (I-i) and if desired converting in any known manner, said compound of Formula (I-i) to its pharmaceutically acceptable acid addition salt.

Compl. Specn. 120 Pages. Drgs 14 Sheets.

Ind. Cl. : 205G (LVI) 167588
Int. Cl. : B60 C 9/04.

A REINFORCED COMPOSITE LAMINATE FOR USE IN TIRES, CONVEYOR BELTS OR THE LIKE AND A TIRE INCORPORATING THE LAMINATE.

Applicant : THE GOODYEAR TIRE & RUBBER COMPANY, A CORPORATION ORGANISED UNDER THE LAWS OF THE STATE OF OHIO, UNITED STATES OF AMERICA HAVING OUR PRINCIPAL PLACE OF BUSINESS AND A POST OFFICE ADDRESS AT 1144 MARKET STREET, AKRON, OHIO 44316-0001, UNITED STATES OF AMERICA.

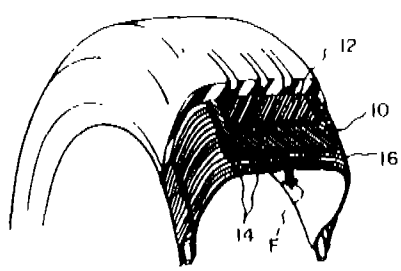
Inventors : KENNETH MICHAEL KOT & BYUNG-LIP LEE.

Application for the Patent No. 167/Del/87, filed on 25th February, 1987.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office Branch, New Delhi-5.

15 Claims

A reinforced composite laminate for use in tires, conveyor belts or the like, having an elastomeric body (10), a plurality of layers of cord (14), each cord being made of two single filaments, said filaments being made from steel having a diameter of from 0.25 to 0.68 mm., said cords being laterally spaced at 8.66 to 11.02 cords per centimeter in said body.




Compl. Specn. 21 Pages. Drgs. 1 Sheet.

Ind. Cl. : 89 XLI. 167589
Int. Cl. : F17C 13/02.

CYLINDER VALVE TESTER FOR SELF CLOSING PIN TYPE LP GAS CYLINDER VALVE.

Applicant : BAL KRISHAN GUPTA, AN INDIAN NATIONAL, L-3, HAUZ KHAS ENCLAVE, NEW DELHI-110016, INDIA.

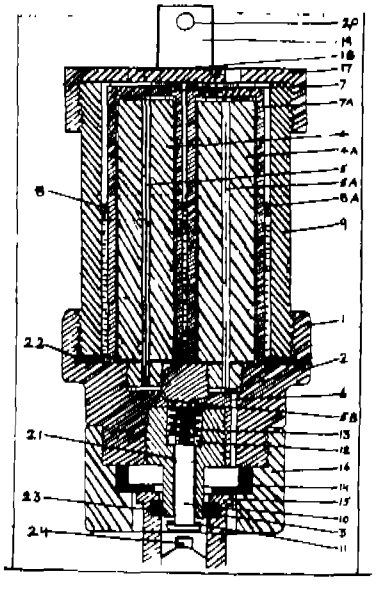
Inventor : BAL KRISHAN GUPTA.

Application for Patent No. 1093/Del/86 filed on 11th December, 1986.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office Branch, New Delhi-110005.

2 Claims

A cylinder valve tester for self closing pin type LP Gas cylinder valve comprising of a body (1) of a suitable metal/plastic with a partition at (2) extending to the lower side having screwed-on stub (3) the said stub having a hole (21) in the center, aplunder (10) moving up and down into the said central hole (21), the said plunger having an end washer (11) to open the passage (21) in its downward position and to close the passage (21) in its upward position, the upper portion of the body screwed with 2 rods (4) and (4A) having central holes (5) and (5A) respectively, the central hole (21) by a passage (5B) the central hole (5A) of the said rod (4A) is connected to the bottom of the said body (1) by a hole (6), inverted tubes (7) and (7A) both closed at the top end are placed covering the said rods (4) and (4A) respectively, the said inverted tubes (7) and (7A) are provided with liquid marks (8) and (8A) repectively, a transparent tube (9) is screwed on the said body (1) at the lower end with a gasket (22) and is screwed on to the top cover (17), the said cover (17) having holes (18) for the escape of leaking gas, the said cover is provided with a rod (19) as its integral part and a hole (20) in the rod to hang the device, the said moving plunger (10) having a plunger retainer nut (12) loaded with a suitable spring (13) to keep the plunger normally in the downward position, a gasket (14) kept in position below the said body by a gasket retainer (16) the said stub (3) goes gas tight inside the mouth washer (23) of the normal LP Gas cylinder valve (15).



Compl. Specn. 8 Pages. Drg. 1 Sheet.

Ind. Cl. : 32E. 167590
Int. Cl.[4] : C08 F 4/00.

A PROCESS FOR THE CATALYTIC POLYMERIZATION OF AN OLEFIN.

Applicant : SHELL INTERNATIONALE RESEARCH MAATSCHAPPIJ B.V., A NETHERLANDS COMPANY, OF CAREL VAN BYLANDTLAAN 30, 2596 HR THE HAGUE, THE NETHERLANDS.

Inventors : ROBERT CHARLES JOB & KENZIE NOZAKI.

Application for Patent No. 596/Del/1987, filed on 15th July, 1987.

Divisional to Application No. 699/Del/1984 filed on 6th September, 1984. Antedated to 6th September, 1984.

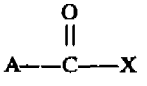
Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office Branch, New Delhi-110005.

7 Claims

A process for the catalytic polymerization of an olefin of the kind such as hereindescribed which comprises polymerizing in any conventional manner said olefin in the presence of a catalyst characterised in that said catalyst comprises a solid catalyst component produced by the process claimed in the parent specification 699/Del/84 in the following manner :

(a) halogenating a magnesium compound of the formula $MgR'R''$ where R' is an alkoxide or aryloxide group and R'' is an alkoxide or aryloxide group or halogen, with a tetravalent titanium halide in the presence of halohydrocarbon such as herein described and an electron donor such as herein described there by forming a halogenated product;

(b) contacting said halogenated product with thinoylchloride or with an acid halide of the formula



where A is an alkyl, aryl, aryl, substituted alkyl, or substituted aryl group and X is a halide at temperature of 40 to 140°C;

(c) contacting the product of step (b) with a tetravalent titanium halide at a temperature of 40 to 140°C, either simultaneously with or subsequent to contacting step b).

Compl Specn. 40 Pages.

Ind. Cl. : 24-B & F-[GROUP-LV] 167591
Int. Cl.[4]-F 16 D 65/12.

IMPROVEMENTS RELATING TO WHEEL MOUNTED BRAKING DISCS.

Applicant : LUCAS INDUSTRIES PUBLIC LIMITED COMPANY, A BRITISH COMPANY OF KINGS ROAD, TYSELEY, BIRMINGHAM B11 2 AH, ENGLAND.

Inventor : JOHN CAMPBELL WATSON.

Application No. 688/Mas/86 filed on August 28, 1986.

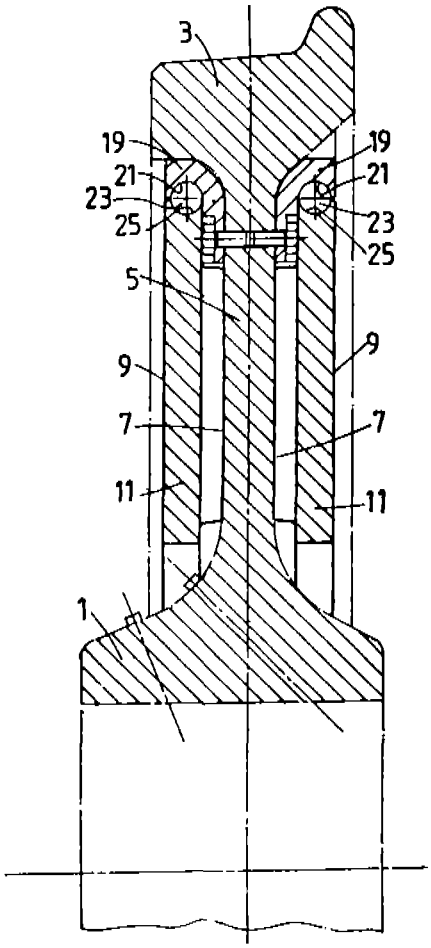
Convention date : September 3, 1985; (No. 8521805; United Kingdom).

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Madras Branch.

13 Claims

A wheel comprising a central hub and an outer rim, interconnected by a web, with an annular braking disc mounted on each side of the web, each disc comprising at least two curved segments, each segment being secured to the web by at least one gripping member which

is secured to the web and grips the outer circumferential edge of the disc segment via an intermediate member, and by at least one resilient retaining connection at each end of the segment, the resilient retaining connections each engaging both the web and a surface provided on an end region of a disc segment.




Compl. Specn. 10 Pages. Drgs. 2 Sheets.

Ind. Cl. : 32 F 1 [GROUP IX(1)] 167592
Int. Cl.[4] : C 07 C 17/20, 19/08.

PROCESS FOR THE SYNTHESIS OF CHLOROPENTAFLUOROETHANE FROM DICHLOROTETRAFLUOROETHANE AND HYDROFLUORIC ACID.

Applicant : ATOCHEM, A FRENCH BODY CORPORATE OF LA DEFENCE 10-4 ET 8, COURS MICHELET, PUTEAUX-HAUTS-DE-SEINE, FRANCE.

Inventor : ROBERT AZERAD BERNARD CHEMINAL HENRI MATHAIS.

Application No. 885/Mas/86 filed on 13th November, 1986.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Madras Branch.

15 Claims

A process for the manufacture of chloropentafluoroethane which comprises reacting anhydrous hydrofluoric acid with dichlorotetrafluoroethane in the gaseous phase at a temperature of from 350 to 550°C and at a pressure of from 0.5 to 4 bars ($0.5 \times 10^5$ to $4 \times 10^5$ Pa) absolute in the presence of a catalyst, wherein the catalyst is prepared by reacting, in a gaseous phase, at a temperature of from 150 to 500°C, an activated alumina, having a purity of at least 99.2% by weight, a sodium oxide content of not more than 300 ppm and a volume of those pores with a radius of 40 angstroms or more of at least 0.7 $cm^3/g$, with :

(a) hydrofluoric acid, or

(b) a mixture of (i) hydrofluoric acid and (ii) air, nitrogen or an organic fluoro compound.

Compl. Specn. 21 Pages. Drg. NIL.

Ind. Cl. : 32-A.1-[GROUP-IX(1)] 167593
Int. Cl[4] : C 09 B 43/00.

PROCESS FOR PREPARING A MONOAZO DYESTUFF.

Applicant : CASSELLA AKTIENGESELLSCHAFT, A BODY CORPORATE ORGANIZED UNDER THE LAWS OF WEST GERMANY OF 526 HANAUER LANDSTRASSE, 6000 FRANKFURT/MAIN-FECHENHEIM, WEST GERMANY.

Inventors : (1) ULRICH BUHLER, (2) MANFRED HAHNKE, (3) ALBERT BODE, (4) KURT ROTH, (5) MARGARTE BOOS.

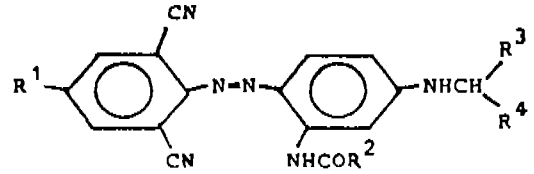
Application No. 206/Mas/88 filed on March 30, 1988.

Divisional to Patent No. 163546 (1031/Mas/84) (Ante-date to December 22, 1984).

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Madras Branch.

6 Claims

Process for preparing a monoazo dyestuff of the formula I of the accompanying drawings, in which

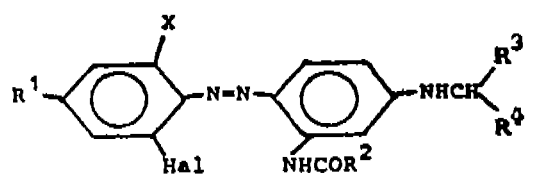



Formula I

$R^1$ denotes alkyl of 2 to 6 carbon atoms, fluorine, chlorine, bromine, alkoxy of 1 to 4 carbon atoms or trifluromethyl,

$R^2$ denotes alkyl of 1 to 3 carbon atoms, and

$R^3$ and $R^4$ independently of the other, each denote alkyl of 1 to 4 carbon atoms, the said process comprises, replacing halogen by cyano in an azo dyestuff of the formula II




Formula II

of the accompanying drawins in a known manner to obtain a monoazo dyestuff of the formula I.

Compl. Specn. 14 Pages. Drg. 1 Sheet.

Ind. Cl. : 59 A, B [GROUP II (2)] 167594
Int. Cl.[4] : E 03 F 5/02.

AN IMPROVED INSPECTION CHAMBER FOR INSPECTING SEWAGE LINES.

Applicant : SRIPOORNA PLASTECH PRIVATE LIMITED, 64, THIRD MAIN ROAD, GANDHI NAGAR, MADRAS-600 020, A COMPANY DULY ORGANISED AND EXISTING UNDER THE LAWS OF THE UNION OF INDIA.

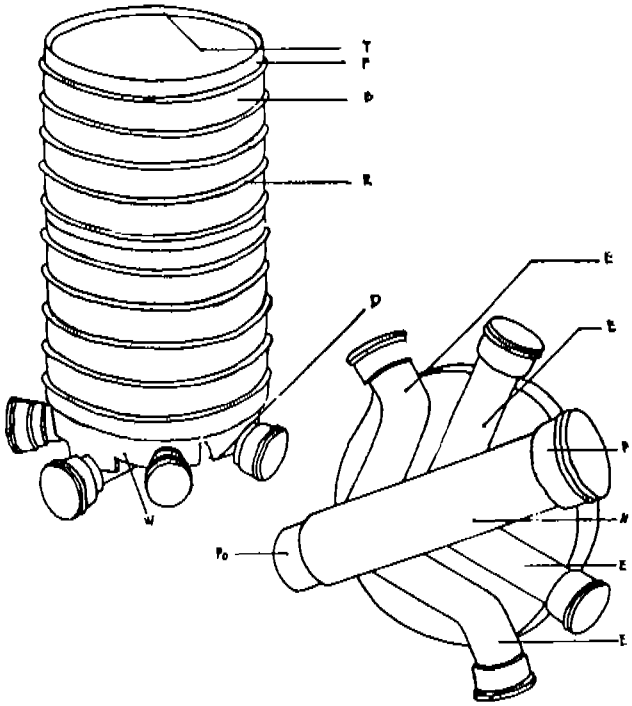
Inventor : SHEILA SRI PRAKASH.

Application No. 368/Mas/88 filed on 27th 1988.

Appropriate Office for Opposition Proceedigns (Rule 4, Patens Rules, 1972), Patent Office, Madras Branch.

6 Claims

An improved inspection chamber for inspection sewage lines, moulded out of plastic, comprising a barrel-shaped body, said body having a ribbed-wall construction costituted by a plurality of spaced, moulded, endless ribs running around the body in substantially parallel relationship with respect to each other and to the base of the body; a main sewage channel moulded on the internal surface of the said base, the main channel opening out, at its extremities, on the wall of the body into inlet and outlet pipe-connections, said main channel inclining downwardly from its inlet to its outlet; and a plurality of auxiliary sewage channels, also moulded on the internal surface of the said base, one end of each auxiliary channel being connected to the main channel, with the other and thereof opening out on the wall of the body into an inlet pipe-connection.



Compl. Specn. 9 Pages. Drg. 1 Sheet.

Ind. Cl. : 32-C-[GROUP-IX(1)] 167595
Int. Cl.[4] : C 07 H 21/00.

A PROCESS FOR PREPARING SYNTHETIC OLIGONUCLEOTIDES USEFUL AS PROBES FOR THE MALE GENOME OF RUMINANTS, PARTICULARLY OF THE GENUS BOS.

Applicants : (1) INSTITUT NATIONAL DE LA RECHERCHE AGRONOMIQUE (INRA), OF 149, RUE DE GRENELLE, 75007, PARIS, FRANCE;

(2) INSTITUT PASTEUR, OF 28, RUE DU DOCTEUR ROUX, 75724 PARIS CEDEX 15, FRANCE;

(3) COMMISSARIAT A L'ENERGIE ATOMIQUE (CEA), OF 29-33, RUE DE LA FEDERATION, 75015 PARIS, FRANCE, ALL FRENCH INSTITUTIONS.

Inventors : (1) BISHOP COLIN, (2) COTINOT CORINNE, (3) FELLOUS MARC, (4) KIRSZENBAUM MAREK, (5) VAIMAN MARCEL.

Application No. 609/Mas/88 filed on August 30, 1988.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Madras Branch.

4 Claims

A process for preparing synthetic oligonucleotides useful as probes for the male genome of ruminants, particularly of the genus Bos, characterized in that it comprises the following steps :

(a) A step of selecting at lest a fragment taken in the group consisting of :

5′ 3′
— —
ATCATGCAGGACCGGATGTGCTCCAACGACTG-TTTATCGGCTGCTT (A)

known in itself, said fragment comprising at least 10 bases of sequence A, among which are at least 5 consecutive bases of the latter, and a fragment having a nucleotide sequence represented by the formula (12)

5′ 3′
ACCGGTCTAGGTCTAGCCCTTGTTCGGGACGC-ACATCACAGGCTCCTGAGCCCCCATCTC
(12)

(b) a step of synthesizing, by any appropriate procedure, oligonucleotides having the sequence of a fragment selected in step (a).

Compl. Specn. 27 Pages. Drgs. NIL.

Ind. Cl. : 55-D. 2—[GROUP-XIX(1)] 167596
Int. Cl.[4] : A 01 N 43/54

A PROCESS FOR THE PRODUCTION OF STABILIZED AGROCHEMICAL COMPOSITION.

Applicant : TAKEDA CHEMICAL INDUSTIES LTD., OF 27 DOSHOMACHI, 2-CHOME, HIGASHI-KU, OSAKA 541, JAPAN, A JAPANESE COMPANY.

Inventors : (1) KANJI AKASHI, (2) TATSUO ASOGAWA.

Application No. 612/Mas/88 filed on August 31, 1988.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Madras Branch.

6 Claims

A process for producing a stabilized agrochemical composition, which comprises mixing a pyrimidine derivative of the formula shown in fig. 1 of the drawings wherein Ar phenyl group substituted by at least one $C_{1-4}$ alkyl; $R_1$, $R_2$ and $R_3$ independently mean a $C_{1-4}$ alkyl group, or its salt in a proportion of about 0.0001 to 90 parts by weight of the total composition, an amine compound having 4 to 150 carbon atoms of the formula

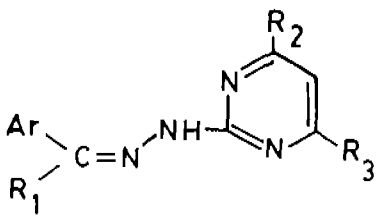
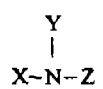


Fig. 1



in which X, Y and Z are independently hydrogen or alkyl provided that at least one of X, Y and Z is an alkyl group, and said alkyl group may be interrupted by oxygen and may be substituted by hydroxy or amino, wherein the amount of the amine compound is in the range of about 0.05 to 10 parts by weight of the total composition and known carrier.

Compl. Specn. 23 Pages. Drgs. 2 Sheets.

Ind. Cl. : 55-D. 2—[GROUP-XI(1)] 167597
Int. Cl.[4] : A 01 N 43/54

A PROCESS FOR PRODUCING A STABILISED AGROCHEMICAL COMPOSITION

Applicant : TAKEDA CHEMICAL INDUSTRIES LTD., A JAPANESE COMPANY, OF 27, DOSHOMACHI 2-CHOME MIGASHI-KU, OSAKA 541, JAPAN.

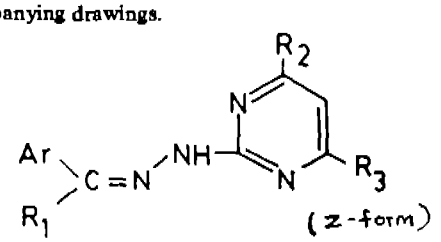
Inventors : (1) KANJI AKASHI, (2) TATSUO ASOGAWA.

Application No. 613/Mas/88 filed on August 31, 1988.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Madras Branch.

7 Claims

A process for producing a stabilized agrochemical composition, which comprises mixing a pyrimidine derivative of the formula I of the accompanying drawings.



Formula I

wherein Ar means a phenyl group substituted by atleast one $C_{1-4}$ alkyl; $R_1$, $R_2$ and $R_3$ independently mean a $C_{1-4}$ alkyl group or its salt, in a proportion of about 0.0001 to 90 parts by weight of the total composition, an oxide or hydroxide of zinc, calcium or magnesium, wherein the amount of the oxide or hydroxide is in the range of about 0.0001 to 50 parts by weight of the total composition and known carrier.

Compl. Specn. 23 Pages. Drgs. 2 Sheets.

Ind. Cl. : 55-D. 2 & 60-X(1)—[GROUPS-XIX(1) & LXVI(3)] 167598
Int. Cl.[4] : A 01 N 27/00

A PROCESS FOR THE PREPARATION OF A NOVEL INSECTICIDE COMPOSITION FOR CONTROLLING HARMFUL INSECTS OF SPECIES HOMOPTERA AND THYSANOPTERA AND IN PARTICULAR APHIDS AND THRIPS.

Applicant : CENTRALEN INSTITUTE PO CHIMICHESKA PROMISHLENOST, A SCIENTIFIC AND RESEARCH INSTITUTE ORGANIZED UNDER THE LAWS OF BULGARIA, OF SOFIA, BOUL. IIO SHI MIN 14, BULGARIA.

Inventors : (1) GEORGI GEORGIEV GEORGIEV, (2) NATALIYA BORISSOVA HLEBAROVA, (3) DATCHO TODOROV DIMITROV, (4) ATANAS PETROV DIMITROV.

Application No. 651/Mas/88 filed on September 16, 1988.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Madras Branch.

2 Claims

A process for the preparation of a novel insecticide composition for controlling harmful insects of species homoptera and thysanoptera and in particular aphids and thrips comprising admixing 80 to 95 weight percent of normal paraffins having $C_{18}$ to $C_{28}$ carbon chain with 20 to 5 weight percents of a mixture of etoxylated alcohols and etoxylated alkylphenols, homogenising the mixture optionally in the presence of a known solvent.

Compl. Specn. 10 Pages. Drg. NIL.

Ind. Cl. : 32-F. 2—[GROUP-LX(1)] 167599
Int. Cl.[4] : C 07 D 295/04

PROCESS FOR THE PREPARATION OF AN ALKYI ENEDIAMINE DERIVATIVE.

Applicant : NIPPON CHEMIPHAR CO., LTD., OF 2-2-3 IWAMOTO-CHO, CHIYODA-KU, TOKYO, JAPAN, A JAPANESE COMPANY.

Inventors : (1) MITSUO MASAKI, (2) HARUHIKO SHINOZAKI, (3) MASARU SATOH, (4) KOICHI HASHIMOTO, (5) TOSHIRO KAMISHIRO.

Application No. 657/Mas/88 filed on September 19, 1988.

Divisional to Patent No. 164200 (63/Mas/87), Ante-dated to January 30, 1987.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Madras Branch.

2 Claims

A process for the preparation of an alkylenediamine derivative having the formula (I) :

$$A—N(R^4)—(CH_2)_p—N(CH_2)_q \quad (I)$$

wherein

A is a group having the formula (III) :

$$R^3—(CH_2)_k \quad (III)$$

wherein $R^3$ is a straight or branched aliphatic hydrocarbon group containing 3-8 carbon atoms, an alicyclic group containing 5—8 carbon atoms, an aryl group, or an aralkyl group having an alkyl group containing 1—4 carbon atoms, and k is an integer of 0 to 3; and

$R^4$ is a straight or branched alihatic hydrocarbon group containing 3-11 carbon atoms, an aliphatic hydrocarbon group containing an ester bonding and 3—11, carbon atoms an aliphatic hydrocarbon group containing an ether bonding and 3—11 carbon atoms, or an aralkyl group having an alkyl group containing an ether bonding and 2—5 carbon atoms;

P is an integer of 2 to 6;

and

q is an integer of 4 to 7;

which comprises recting a carboxylic acid having the formula (V) :

$$D—COOH \quad (V)$$

wherein D is a group obtained by removing terminal methylene moiety from the group of A group, or its reactive derivative with an amine derivative having the formula (VI) :

$$HN(R^4)—(CH_2)_p—N(CH_2)_q \quad (VI)$$

wherein each of $R^4$, p and q has the same meaning as above, at a temperature from room temperature to 160°C to obtain a compound having the formula (VII) :

$$D—CO—N(R^4)—(CH_2)_p—N(CH_2)_q \quad (VII)$$

wherein each of $R^4$, D, p and q has the same meaning as above;

and reducing the compound of the formula (VII) to obtain the compound of the formula (I) by any known manner.

Compl. Specn. 24 Pages. Drg. Nil

Ind. Cl. : 32-$F_{2b}$-[GROUP-IX (1)] 167600
Int. Cl.[4] : C 07 D 515/00.

A PROCESS FOR PREPARING SPIRO-OXATHIOLANE/QUINUCLIDINE COMPOUNDS.

Applicant : THE ISRAEL INSTITUTE FOR BIOLOGICAL RESEARCH, STATE OF ISRAEL, REPRESENTED BY THE PRIME MINISTER'S OFFICE, P.O.B. 19, NESS-ZIONA, ISRAEL.

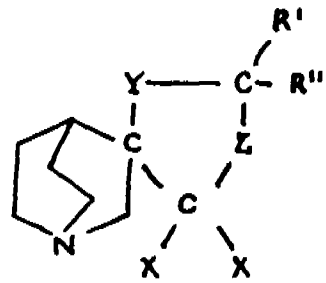
Inventors : (1) ABRAHAM FISHER, (2) ISHAI KARTON.

Application No. 695/Mas/88 filed on 5th October, 1988.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Madras Branch.

6 Claims

A process for preparing spiro-oxathiolane/quinuclidine compounds corresponding with the schematic structural formula (I) of the accompanying drawing and geometrical isomers, enantiomers, diastereoisomers, racemates and acid addition salts thereof, wherein one of Y and Z is O and the other is S (= O)$_n$; n is O, 1 or 2; R' and R" are each selected from the group consistin_ of hydrogen, $C_{1-6}$ alkyl, $C_{2-6}$ alkenyl, $C_{2-6}$ alkynyl, $C_{1-6}$ hydroxyalkyl, $C_{1-6}$ aminoalkyl $C_{3-7}$ cycloalkyl, aryl, darylmethylol, $C_{1-6}$ alkyl substituted by at least one aryl group, $C_{1-6}$ hydroxyalkyl in which the hydroxy is protected, and $C_{1-6}$ aminoalkyl in which the amino is protected, provided that at least R' and R" is other than hydrogen; and each X is hydrogen, provided further that when Y is O and Z is S simultaneously, then at least one of R' and R" is selected from the group consisting of $C_{2-6}$ alkenyl, $C_{2-6}$ alkynyl, cyclopropyl, cyclobutyl, cycloheptyl, $C_{1-6}$ hydroxyalkyl, $C_{1-6}$ aminoalkyl, $C_{1-6}$ hydroxyalkyl in which the hydorxy is protected, and $C_{1-6}$ aminoalkyl in which the amino is protected, which process comprises the initial step of reacting in a known organic solvent and in presence of an acid catalyst, (a) the thioepoxide of 3- methylene-quinuclidine, with (b) a carbonyl compound of formula R'-CO-R" where R' and R" have the above defined significance, and optionally carrying out one or more of the following subsequent steps, namely :




Formula I

(i) removing the protecting group(s) from a product in which at least one of R' and R" is selected from hydroxyalkyl in which the hydroxy is protected and aminoalkyl in which the amino is protected;

(ii) separating the product into its geometrical and (or) optical isomers;

(iii) converting the product obtained in free, base form to an acid addition salt;

(iv) converting the product obtained in acid addition salt form to the free base;

(v) reducing the product in which n is 1 or 2 to the analogue in which n is O;

(vi) oxidizing the product in which n is O to the analogue in which in is 1 or 2;

(vii) isolating the product of said initial step of reacting (a) with (b), or the product of any of the subsequent steps (i) to (v), by removal of solvent therefrom.

The compounds prepared according to this invention are useful in the treatment of central nervous system.

Compl. Specn. 46 Pages. Drg. 1 Sheet.

Name Index of Application for Patents for the Month of March, 1990 (Nos. 186/Cal/90 to 267/Cal/90, 50/Bom/90 to 78/Bom/90, 157/Mas/90 to 933/Mas/90 and 189/Del/90 to 398/Del/90)

Name & Application No.

CALCUTTA

(186/Cal/90 to 267/Cl/90)

—B—

BP Australia Ltd.—221/Cal/90.

Babcock & Wilcox Co. The.—196/Cal/90.

Bayerische Motoren Werke Aktiengesellschaft.—253/Cal/90.

Bell Pole Co. Ltd.—187/Cal/90.

Beloit Corporation.—217/Cal/90.

Blumco Detergents Ltd.—205/Cal/90.

—C—

CF Braun Inc.—230/Cal/90.

Colux Gesellschaft Fur Light-Und Leichtbau GMBH.—190/Cal/90.

Concast Standard AG.—264/Cal/90.

—D—

Das K. N.—195/Cal/90.

Degussa Aktiengesellschaft.—193/Cal/90.

Dixie Chemical Co.—255/Cal/90.

—E—

E.I. Du Pont De Nemours & Co.—86/Cal/90, 203/Cal/90, 216/Cal/90, 219/Cal/90, 220/Cal/90, 227/Cal/90, 252/Cal/90.

Eaton Corporation.—257/Cal/90.

—F—

Franz Plasser Bahnbaumaschinen Industiegeselschaft m.b.H.—214/Cal/90, 215/Cal/90.

—G—

General Electric Co.—218/Cal/90.

Ghosh B.—195/Cal/90.

—H—

Himont Incorporated.—259/Cal/90, & 260/Cal/90.

Hoechst A.G.—197/Cal/90, 198/Cal/90, 228/Cal/90 & 254/Cal/90.

Name & Application No.

—I—

Ibico, Inc.—241/Cal/90.

Indian Jute Industries Research Association.—225/Cal/90.

—J—

JAE Woon Kim.—267/Cal/90.

Johnson & Johson Medical, Inc.—250/Cal/90 & 251/Cal/90.

—K—

Kalmson Pty. Ltd.—226/Cal/90.

Karl Fischer Industricanlagen Gmbh.—199/Cal/90.

Krishna N.V.S.—195/Cal/90.

Krone Aktiengesellschaft.—243/Cal/90.

Kuraray Co. Ltd.—242/Cal/90.

—L—

Lanxide Technology Co. Lp.—209/Cal/90.

—M—

Mdt Corporation.—192/Cal/90.

Massey-Ferguson Services N. V.—202/Cal/90.

Meneil—PPC Inc.—211/Can/90.

Metallgesellschaft Aktiengesellschaft.—265/Cal/90, 266/Cal/90.

Mitra, S.K.—195/Cal.90.

Mitsui Toatsu Chemicals.—242/Cal/90.

Mitutoyo Mfg. Co. Ltd.—234/Cal/90, 235/Cal/90 & 236/Cal/90.

Mukherjee, T. Dr. 195/Cal/90.

—N—

Nandy, D. K.—194/Cal/90, 206/Cal/90 & 207/Cal/90.

Nerukar, H. M.—195/Cal/90.

—O—

O & K Orenstien & Koppel Ag.—229/Cal/90.

Oetiker Hans.—239/Cal/90.

Otto India Ltd.—249/Cal/90.

—P—

Pandey, R. S. 210/Cal/90.

Philips Petroleum Co., 231/Cal/90, 256/Cal/90.

Name & Application No.

—P-Contd.—

Pickhard, E.—213/Cal/90

Poltavsky Meditsinsky Stomatologichesky Institut, USSR.—208/Cal/90.

Projects & Development India Ltd.—232/Cal/90

—R—

RCA Licensing Corporation.—200/Cal/90.

Rajagopalan, K.—233/Cal/90.

Rajan, V. S.—237/Cal/90.

Roquette Freres.—248/Cal/90.

—S—

Saarbergwerke Ag.—224/Cal/90.

Saint—Gobai Vitrage International.—188/Cal/90.

Samsung Electron Devices Co. Ltd.—244/Cal/90.

Schmidt, G.—189/Cal/90.

Schmidt, H.—189/Cal/90.

Schroders, T.—223/Cal/90.

Siemens Aktiengesellschaft.—201/Cal/90, 245/Cal/90, 246/Cal/90, & 247/Cal/90.

Sinha, H. P.—195/Cal/90.

Still Otto GmbH.—249/Cal/90.

Stoping Aktiengsellschaft.—261/Cal/90.

—T—

Tamfelt, Inc.—240/Cal/90.

Tata Iron & Steel Co. Ltd.—195/Cal/90.

Technische Hochschule Zwickau.—262/Cal/90.

—U—

Unilever Plc.—238/Cal/90.

Union Carbide India Ltd.—222/Cal/90.

—V—

Veb Schwermaschinenbau "Karl Liebknechst" Madge burg —262/Cal/90.

Vista Chemical Co.—204/Cal/90.

Voest-Alpine Industrieanlagenbau Gesellschaft.—191/Cal/90.

Voest-Alpine Stahl Aktiengesellschaft.—191/Cal/90.

Name & Application No.

—W—

Westing house Electric Corporation.—258/Cal/90.

—Y—

Yaroslavsky Mezhotraslevoi Nauchno-Tekhnichesky Tsentr.—263/Cal/90.

Yokogawa Electric Corporation.—212/Cal/90.

BOMBAY

(50/Bom/90 to 78/Bom/90)

—C—

Chimanlal, N.—63/Bom/90.

—G—

Garware Wall Ropes Ltd.—62/Bom/90.

—H—

Harish, Textile Engineers Ltd.—71/Bom/90.

Hindustan Lever Ltd.—50/Bom/90, 51/Bom/90, 55/Bom/90, 65/Bom/90, 66/Bom/90, 67/Bom/90 & 68/Bom/90.

—J—

Jain Irrigation Systemo Ltd.—52/Bom/90.

—K—

Karandikar, S. G.—63/Bom/90.

Kulkarni, A. H.—77/Bom/90.

—M—

Mohanty, S. K.—Dr. 76/Bom/90.

Mordia, T. K.—54/Bom/90.

Mutha, V. S.—60/Bom/90.

—N—

N. K. K. Corporation.—53/Bom/90.

Narayan, A.—63/Bom/90.

—P—

Pandit, K. V.—56/Bom/90, 57/Bom/90, 58/Bom/90 & 59/Bom/90.

Parikh, R. R. 78/Bom/90.

Patel, G.—63/Bom/90.

Patel, M. B.—63/Bom/90

Name & Application No.

—P-Contd.—

Patel, S. B —76/Bom/90.

Pennwalt India Ltd.—69/Bom/90 & 70/Bom/90.

Purthviraj, B. S.—64/Bom/90.

—S—

Shah. Y. M.—61/Bom/90.

Shidham, A. V.—Mrs.—75/Bom/90.

Shidham, V. B.—Dr. 75/Bom/90

—T—

Tank, M. P 73/Bom/90, & 74/Bom/90.

Technova Platom[illegible] Systems Ltd.—72/Bom/90.

MADRAS

(157/Mas/90 to 233/Mas/90)

—A—

A. Ahistrom Corporation.—226/Mas/90.

Alasuisse-Lonza Services Ltd.—191/Mas/90.

Alice. I.—223/Mas/90.

Agromen Agranmenedzseri KFT.—215/Mas/90.

Ammonia Casele S.A.—175/Mas/90, 176/Mas/90, 177/Mas/90.

Asea Brown Boveri Inc.—186/Mas/90.

Astra Research Centre India.—230/Mas/90.

Audco India Ltd.—164/Mas/90.

—B—

BASF Aktiengesellschaft.—173/Mas/90.

BASF Lacke.+Farben Aktiengesellschaft. —167/Mas/90.

Badami, V.R.N R.—182/Mas/90.

Battimore Aircoil Co.—181/Mas/90.

Board of Regents.—199/Mas/90, 200/Mas/90.

—C—

Caterpiller Inc.—166/Mas/90, 224/Mas/90.

Chung Packaging Co.—228/Mas/90.

—D—

Desikan, V.—178/Mas/90.

Name & Application No.

—E—

Eduard Kusters Maschinenfabrik GmbH.—& Co. 159/Mas/90.

—G—

GEC Plessey Telecommunications Ltd.—160/Mas/90, 220/Mas/90.

General Instrument Corporation.—231/Mas/90.

—H—

Hamon-Sobelco S.A.—201/Mas/90.

Henkel Kommanditgesellschaft auf Aktien.—170/Mas/90.

Hooper B.—192/Mas/90, 193/Mas/90.

Huber H.G.—207/Mas/90.

—I—

ITC Equatorial Satcom Ltd.—165/Mas/90.

Indian Institute of Technology.—163/Mas/90.

Indian Space Research Organisation. (ISRO Headquaters).—211/Mas/90.

Institut Francais Du Petrole.—196/Mas/90, 216/Mas/90.

—J—

JS. Telecom.—214/Mas/90.

—K—

Krishnamoorthy, V. Dr.—222/Mas/90.

—L—

Lehigh University.—206/Mas/90.

—M—

Maschinefabrik Rieter Ag.—157/Mas/90, 158/Mas/90, 172/Mas/90, 179/Mas/90, 180/Mas/90, 185/Mas/90, 195/Mas/90, 202/Mas/90.

Micropack Ltd.—171/Mas/90.

Minnesota Mining & Manufacturing Co.—188/Mas/90, 223/Mas/90.

Munn, E.A.—203/Mas/90.

—N—

Naptune Inflatables (P) Ltd.—237/Mas/90.

—O—

Osbakk G.—221/Mas/90.

—P—

Peavey Electronics Corporation.—162/Mas/90, 187/Mas/90.

Pechiney Electrometallurgee.—225/Mas/90.

Potters Industries Inc.—227/Mas/90.

Name & Application No.

—R—

Rajendran, G.—218/Mas/90.

Rao, P. S. Dr.—217/Mas/90.

Refurbished Turbine Components Ltd.—197/Mas/90, 198/Mas/90, 213/Mas/90.

Rhone-poulenc Chimie.—168/Mas/90.

Rhone-Poulenc Films.—169/Mas/90.

Rozenwaser, D.—183/Mas/90.

—S—

Schlumberger Holdings Ltd.—194/Mas/90.

Shell Internationale Research Matschappij B.V.—210/Mas/90.

Smith, T.S.—203/Mas/90.

Snow Brand Milk Products Co. Ltd.—205/Mas/90.

Sobrevin Societe Brevets Industriels-Establissment.—174/Mas/90.

Societe des Produits Nestle S.A.—189/Mas/90, 190/Mas/90.

Sony Corporation.—204/Mas/90.

Sulzer-Escher Wyss A.G.—209/Mas/90.

Sun Plan Investments Ltd.—161/Mas/90.

—U—

Umberto Zardi.—176/Mas/90.

Union Carbide Chemicals & Plastics Co. Inc.—212/Mas/90.

—V—

Vereinigung Zur Forderugn des Instituts fur Kunststoffverarbeitung in Industrie and Hardwerk an der Rhain-West Technischen Hochschule Aachen e.v.—184/Mas/90.

—W—

Westinghouse Brake and Signal.—229/Mas/90.

Winther A.A.—208/Mas/90.

DELHI

(189/Del/90 to 328/Del/90).

—A—

Abichandani, H. Dr.—248/Del/90.

Actel M.—209/Del/90.

Albright & Wilson Ltd.—200/Del/90.

Name & Application No.

—A-Contd.—

Alcan International Ltd.—239/Del/90, 252/Del/90, 253/Del/90, 263/Del/90,.

Allied Signal Inc.—245/Del/90.

Alphatrad S.A.—244/Del/90.

—B—

B.F. Goodrich Co. The.—225/Del/90, 265/Del/90.

Babcock & Wilcox Co.—198/Del/90.

Bachmann Corporate Services Inc.—302/Del/90.

Battery Technologies Inc.—249/Del/90.

Bharat Heavy Electricals Ltd.—232/Del/90, 233/Del/90.

Blacke-Durr Aktiengesellschaft.—256/Del/90, 257/Del/90.

Borden (UK) Ltd.—195/Del/90.

Butter D.R.—204/Del/90.

—C—

CHU Associates, Inc.—193/Del/90.

Castagner, B.—277/Del/90.

Ciba-Geigy AG.—254/Del/90.

Clausen, H.J.—327/Del/90.

Colgate-Palmolive Co.—210/Del/90, 211/Del/90.

Corning Incorporated.—301/Del/90.

Council of Scientific & Industrial Research.—222/Del/90, 223/Del/90, 224/Del/90, 282/Del/90, 283/Del/90, 284/Del/90, 285/Del/90, 286/Del/90, 287/Del/90, 288/Del/90, 308/Del/90, 309/ Del/90, 310/Del/90, 311/Del/90, 312/Del/90, 313/Del/90.

—D—

Doellner O.L.—270/Del/90.

Dorr-Oliver Incorporated.—322/Del/90.

Douesnel. X.—289/Del/90.

—E—

E.R. Souibb & Sons, Inc.—246/Del/90.

Exxon Chemical Patents, Inc.—251/Del/90, 320/Del/90.

—G—

Gencorp Inc.—202/Del/90, 203/Del/90.

Gill, G.S.—216/Del/90.

Name & Application No.

—G-Contd.—

Gupta, M.C.—213/Del/90, 214/Del/90, 243/Del/90.

Golden Peakock Overseas Pvt. Ltd.—318/Del/90.

—H—

Hammami, A.—317/Del/90.

Horsell Graphic Industries Ltd.—323/Del/90.

—I—

ICI Australia Operations Proprietary Ltd.—297/Del/90.

IL Shin Industrial Co. Ltd.—227/Del/90.

Imperial Chemical Industries Plc.—226/Del/90, 273/Del/90, 305/Del/90, 319/Del/90, 328/Del/90.

Intel Gusgarda Pvt. Ltd.—266/Del/90.

—J—

Jets Systemer A/S.—197/Del/90.

John Crane UK Ltd.—262/Del/90.

Johnson Corporation The.—196/Del/90.

—K—

Khanna, P. Miss. (Retd.).—207/Del/90.

Kumar, A.—250/Del/90.

Kumar, P.—314/Del/90.

—L—

Laboratories Del Dr. Esteve S.A.—255/Del/90.

Lacvac Pty. Ltd.—264/Del/90.

La Soudure Autogene Francaise.—240/Del/90, 241/Del/90 & 242/Del/90.

Lenox Institute for Research Inc.—221/Del/90.

Lenzing Aktiengesellschaft.—292/Del/90.

Lipha, Lyonnaise Industrielle Pharmaceutique.—271/Del/90.

Lubrizol Corporation, The.—269/Del/90, 280/Del/90, 281/Del/90, 306/Del90, 325/Del/90 & 326/Del/90.

—M—

Maheco Pty. Ltd.—324/Del/90.

Malbec E.—236/Del/90.

Miner Enterprises Inc.—304/Del/90.

Mitsui Toatsu Chemicals, Inc.—189/Del/90 & 190/Del/90.

—N—

N. V. Bekaert S. A.—201/Del/90.

Nanduri, V. Dr.—230/Del/90.

National Institute of Immunology.—235/Del/90 & 247/Del/90.

National Institute of Health & Family Welfare.—296/Del/90.

Name & Application No.

—N-Contd.—

National Research Development Corporation.—278/Del/90.

Norsk Hydro A. S.—231/Del/90.

—O—

Olofsson B.—300/Del/90.

—P—

Pfaudler Werke AG.—299/Del/90.

Pfizer Hospital Products Group Inc.—272/Del/90.

Pfizer Inc.—315/Del/90.

Pichler W.—229/Del/90

Procter & Gamble Co., The.—228/Del/90, 258/Del/90, 259/Del/90, 260/Del/90, 261/Del/90, 275/Del/90 & 276/Del/90.

—R—

Rajasthan Electronics & Instruments Ltd.—293/Del/90, 294/Del/90, 295/Del/90.

Rao, Y. S.—199/Del/90.

Raswant, S.—237/Del/90.

Richardson-Vicks, Inc.—206/Del/90.

Richter Gedeon Vegyeszeti Gyar Ri.—321/Del/90.

Riker Laboratories, Inc.—279/Del/90.

—S—

Saini, R. S.—274/Del/90.

Sarma, S. C., Dr.—248/Del/90.

Satpathy, M., Mrs.—238/Del/90.

Sharma A. K.—267/Del/90.

Shell Internationale Research Maatschappij B. V.—212/Del/90.

Sing, G. (Captain).—215/Del/90 & 217/Del/90.

Sing, H.—192/Del/90.

Societe De Conseils De Recharches Et D' Applications Scientifiques (S. C. R. A. S.).—208/Del/90, 218/Del/90, 219/Del/90 & 220/Del/90.

—T—

Toupin, J. F.—289/Del/90.

—U—

U. C. Industries, Inc.—191/Del/90.

UOP.—194/Del/90 & 303/Del/90.

UOP Inc.—298/Del/90 & 307/Del/90.

Union Carbide Corporation.—205/Del/90.

—V—

Vsesojuzny Nauchno-Issledovatelsky Institut Textilene-Galantereinoi Promyshlennosti Nauchno-Proizvedstvennogo obiedinenia "TEXTIL GALANTEREYA.—234/Del/90.

—W—

Waitzenegger, C.—277/Del/90.

Warner-Lambert Co.—268/Del/90.

## REGISTRATION OF DESIGNS

The following designs have been registered. They are not open to inspection for a period of two years from the date of registration except as provided for in Section 50 of the Design Act, 1911.

The date shown in the each entries are the date of registration in the entry

Class 1. No. 162146. Cenefill Pty. Ltd., C/Peat Marwick Hungerfords,1st floor, Barclays House, 15 Short Street, Southport, Queensland-4350, Australia. "Support Sheet". May 25, 1990.

Class 1. No. 162147. Cenefill Pty. Ltd., C/Peat Marwick Hungerfords, 1st Floor, Barclays House, 15 Short Street, Southport, Queensland-4350, Australia. "Support Sheet". May 25, 1990.

Class 3. No. 161922. Electroplast Tanks Ltd., of 3-C, Camac Street, Calcutta-700016, W. B., India, an Indian Company. "Loft Tank". March 12, 1990.

Class 3. No. 161923. Electroplast Tanks Ltd., of 3-C, Camac Street, Calcutta-700016, W. B., India, an Indian Company. "Cylindrical overhead tank". March 12, 1990.

Class 3. No. 162028. General Industrial Controls Pvt. Ltd., T-107, M.I.D.C., Bhosari, Pune-411026, Maharashtra, India. "Timer". April 12, 1990.

Class 3. No. 162029. General Industrial Controls Pvt. Ltd., T-107, M.I.D.C., Bhosari, Pune-411026, Maharashtra, India. "Plug-in-time Switch". April 12, 1990.

Class 3. No. 162030. General Industrial Controls Pvt. Ltd., T-107, M.I.D.C., Bhosari, Pune-411026, Maharashtra, India. "Hour Meter". April 12, 1990.

Class 3. No. 162214. British Telecommunications, Public Limited Company, a British Company of 81, Newgate Street, London, EC1A, 7 AJ, England. "Payphone elbow unit". June 15, 1990.

Class 3. No. 162346. P. Raghavendra Rao trading as Allied Chems Products No. 139/1/213,, Bilekahalli, Sarvabhoumanagar, Banneraghatta Road, Bangalore-560076, Karnataka, India, an Indian National. : "Containers". July 19, 1990.

Class 12. No. 162176. Emjas Trust, 8th Floor, Mogul's Court, Basheerbagh, Hyderabad-500012, A.P., India. "Biscuits". June 7, 1990.

*Copyright extended for the 2nd period of five years.*

Nos. 155152, 156023, 156987, 155822, 155827, 155828, 155829, 156102 & 156149..... Class 1.

Nos. 156089, 156214, 156217, 155153, 155564, 155766, 155767, 156103, 156075, 155839, 156129 & 158527..... Class 3.

Nos. 155775, 155776, 161659, 150231, 150233..... Class 4.

Nos. 155030, 155031, 155033..... Class 5.

No. 156969. Class 6.

R. A. ACHARYA,
*Controller General of Patents, Designs & Trade Marks.*

PRINTED BY THE MANAGER, GOVERNMENT OF INDIA PRESS, FARIDABAD
AND PUBLISHED BY THE CONTROLLER OF PUBLICATIONS, DELHI, 1990

GIPF—G—327 GI/90—300